CANADIAN PETROLEUM ASSOCIATION STATISTICAL HANDBOOK

SECTION I. LAND, EXPLORATION, DRILLING

TABLE 1	Crown Land Sales - Western Canada and Canada Lands
TABLE 1A	Historical Crown Land Sales - Western Canada
TABLE 1B	Historical Crown Land Sales - Western Canada
TABLE 1C	Historical Crown Land Sales - Western Canada and Canada Lands
TABLE 1D	Historical Crown Land Sales - Western Canada and Canada Lands
TABLE 2	Petroleum Industry Land Holdings in Canada
TABLE 4	Survey Activity in Western Canada (Historical)
TABLE 5	Drilling Completions by Province - Annual
	Drilling Completions - Definitions, Junked Holes
TABLE 6	Wells and Metres Drilling in Western Canada (Historical)
TABLE 7	Canadian Drilling Completions (Historical)
TABLE 7A	Canadian Drilling Completions (Historical)
TABLE 7B	Canadian Drilling Completions (Historical)

APRIL 1992

1991 CROWN LAND SALES - WESTERN CANADA AND CANADA LANDS

	Hectares	*Bonus Paid ($)*
ALBERTA:		
Leases	1 031 973	159 313 119
Exploration Licenses	1 185 448	147 766 226
TOTAL PROVINCIAL SALES	2 217 421	307 079 345
Indian Lands	—	—
Federal Lands	1 096	149 967
TOTAL — 1991	2 218 517	307 229 312
TOTAL — 1990	2 214 776	435 309 064
BRITISH COLUMBIA:		
Leases	85 530	21 107 967
Petroleum & Natural Gas Permits	65 719	3 563 916
Drilling Licenses	198 143	35 038 224
TOTAL PROVINCIAL SALES	349 392	59 710 107
Federal Lands	—	—
TOTAL — 1991	349 392	59 710 107
TOTAL — 1990	529 875	130 622 075
MANITOBA:		
Leases	1 920	124 275
Reservations	—	—
TOTAL PROVINCIAL SALES	1 920	124 275
Indian Lands	—	—
Federal Lands	—	—
TOTAL — 1991	1 920	124 275
TOTAL — 1990	5 616	161 661
SASKATCHEWAN:		
Leases	106 967	14 231 148
Petroleum & Natural Gas Permits	94 593	1 854 016
Drilling Reservations	6 984	317 200
TOTAL PROVINCIAL SALES	208 544	16 402 364
Indian Lands	—	—
Federal Lands	448	113 758
TOTAL — 1991	208 992	16 516 122
TOTAL — 1990	657 850	32 565 101
CANADA LANDS:		
No Cash Bonus Sales in 1991	695 860	(1)
No Cash Bonus Sales in 1990	1 884 435	—
TOTAL:		
TOTAL — 1991	2 778 821(2)	383 579 816
TOTAL — 1990	3 656 187(2)(3)	600 392 835(3)

(1) Work bonus only Offshore Newfoundland $7.33 million, MacKenzie Delta and the Beaufort Sea $56.5 million.

(2) Excludes work bonus acquisitions.

(3) Includes 48 070 hectares and $1 734 935 not available by province.

APRIL 1992

HISTORICAL CROWN LAND SALES - WESTERN CANADA AND CANADA LANDS

	1990		1991	
	Hectares	*Bonus*	*Hectares*	*Bonus*
British Columbia	529 875	130 622 074	349 392	59 710 107
Alberta	2 410 126	434 975 475	2 217 421	307 079 345
Saskatchewan	657 850	32 565 101	208 544	16 402 364
Manitoba	1 920	124 275	1 920	124 275
Canada Lands	1 884 435	(12)	695 860	(12)
Indian & Federal Lands	52 720	2 068 524	1 544	263 725
TOTAL	3 656 187 (13)	600 392 835	2 778 821 (13)	383 579 816

(7) Does not include $10 million annual installment by Alberta Energy Co. for approx. 248 000 hectares in Suffield Block. Total consideration is $54 million of which $10 million was payable 3 months after commencement of gas sales.
(8) Does not include Alberta Energy Company Ltd. payment for Primrose Lake hectarage.
(9) Excl. work bonus bid for Nechako Basin area.
(10) Excl. $100.00 paid for a work bonus interest in 750 000 hectares south of Melville Island.
(11) Excludes $30 million paid by AEC under 1975 Suffield block acquisition agreement (7) in 1986 and $7 million in 1987.
(12) Work bonus only.
(13) Excl. work bonus acquisitions.

APRIL 1992

1991 DRILLING COMPLETIONS — CANADA

	OIL		GAS		TOTAL PRODUCERS		ABANDONED		SUSPENDED		TOTAL	
	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres
TERRITORIES & ARCTIC ISLANDS												
New Field Wildcats	1	1 652	3	4 979	4	6 631	4	8 453	—	—	8	15 084
New Pool Wildcats	—	—	—	—	—	—	—	—	—	—	—	—
Deeper Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	—	—	—	—	—	—	—	—	—	—	—	—
Total Exploratory Tests	1	1 652	3	4 979	4	6 631	4	8 453	—	—	8	15 084
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	—	—
Development Wells	—	—	—	—	—	—	—	—	—	—	—	—
Project Wells	—	—	—	—	—	—	—	—	—	—	—	—
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	—	—
Total Completions	1	1 652	3	4 979	4	6 631	4	8 453	—	—	8	15 084
BRITISH COLUMBIA												
New Field Wildcats	1	2 281	16	41 669	17	43 950	15	25 798	1	2 387	33	72 135
New Pool Wildcats	3	5 958	21	48 214	24	54 172	2	4 060	—	—	26	58 232
Deeper Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	5	7 440	27	43 072	32	50 512	46	81 518	—	—	78	132 030
Total Exploratory Tests	9	15 679	64	132 955	73	148 634	63	111 376	1	2 387	137	262 397
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	—	—
Development Wells	23	34 736	39	59 755	62	94 491	34	57 030	2	2 900	98	154 421
Project Wells	—	—	—	—	—	—	—	—	—	—	—	—
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	2	2 512
Total Completions	32	50 415	103	192 710	135	243 125	97	168 406	3	5 287	237	419 330
ALBERTA												
New Field Wildcats	1	3 017	7	10 266	8	13 283	25	31 019	—	—	33	44 302
New Pool Wildcats	99	161 894	218	305 015	317	466 909	390	577 593	2	6 990	709	1 051 492
Deeper Pool Tests	112	138 674	111	162 095	223	300 769	188	231 639	3	4 036	414	536 444
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	135	190 213	241	270 758	376	460 971	251	326 644	2	1 627	629	789 242
Total Exploratory Tests	347	493 798	577	748 134	924	1 241 932	854	1 166 895	7	12 653	1 785	2 421 480
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	—	—
Development Wells	1 106	1 335 357	556	556 524	1 662	1 891 881	353	412 818	7	12 588	2 022	2 317 287
Project Wells	32	17 815	—	—	32	17 815	49	13 682	—	—	97*	37 878*
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	69	96 519
Total Completions	1 485	1 846 970	1 133	1 304 658	2 618	3 151 628	1 256	1 593 395	14	25 241	3 973	4 873 164

* Includes Project Services Wells.

APRIL 1992

SECTION I
Table 5

1991 DRILLING COMPLETIONS — CANADA

	OIL		GAS		TOTAL PRODUCERS		ABANDONED		SUSPENDED		TOTAL	
	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres
SASKATCHEWAN												
New Field Wildcats	13	16 053	4	2 719	17	18 772	24	32 675	—	—	41	51 447
New Pool Wildcats	26	25 582	8	6 480	34	32 062	25	31 803	—	—	59	63 865
Deeper Pool Tests	1	2 305	—	—	1	2 305	—	—	—	—	1	2 305
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	64	79 851	46	29 416	110	109 267	42	47 206	—	—	152	156 473
Total Exploratory Tests	104	123 791	58	38 615	162	162 406	91	111 684	—	—	253	274 090
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	—	—
Development Wells	435	557 696	348	193 248	783	750 944	42	50 886	1	1 285	826	803 115
Project Wells	—	—	—	—	—	—	—	—	—	—	—	—
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	54	43 241
Total Completions	539	681 487	406	231 863	945	913 350	133	162 570	1	1 285	1 133	1 120 446
MANITOBA												
New Field Wildcats	—	—	—	—	—	—	—	—	—	—	—	—
New Pool Wildcats	—	—	—	—	—	—	—	—	—	—	—	—
Deeper Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	1	1 043	—	—	1	1 043	—	—	—	—	1	1 043
Total Exploratory Tests	1	1 043	—	—	1	1 043	—	—	—	—	1	1 043
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	—	—
Development Wells	49	43 920	—	—	49	43 920	6	5 508	—	—	55	49 428
Project Wells	—	—	—	—	—	—	—	—	—	—	—	—
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	1	682
Total Completions	50	44 963	—	—	50	44 963	6	5 508	—	—	57	51 153
WESTERN CANADA												
New Field Wildcats	16	23 003	30	59 633	46	82 636	68	97 945	1	2 387	115	182 968
New Pool Wildcats	128	193 434	247	359 709	375	553 143	417	613 456	2	6 990	794	1 173 589
Deeper Pool Tests	113	140 979	111	162 095	224	303 074	188	231 639	3	4 036	415	538 749
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	205	278 547	314	343 246	519	621 793	339	455 368	2	1 627	860	1 078 788
Total Exploratory Tests	462	635 963	702	924 683	1 164	1 560 646	1 012	1 398 408	8	15 040	2 184	2 974 094
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	—	—
Development Wells	1 613	1 971 709	943	809 527	2 556	2 781 236	435	526 242	10	16 773	3 001	3 324 251
Project Wells	32	17 815	—	—	32	17 815	49	13 682	—	—	97	37 878*
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	126	142 954
Total Completions	2 107	2 625 487	1 645	1 734 210	3 752	4 359 697	1 496	1 938 332	18	31 813	5 408	6 479 177

* Includes Project Services Wells.

APRIL 1992

SECTION I
Table 5A

1991 DRILLING COMPLETIONS — CANADA

	OIL		GAS		TOTAL PRODUCERS		ABANDONED		SUSPENDED		TOTAL	
	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres
ONTARIO												
New Field Wildcats	—	—	—	—	—	—	—	—	—	—	—	—
New Pool Wildcats	4	3 588	18	9 752	22	13 340	30	22 404	1	890	53	36 634
Deeper Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	—	—	—	—	—	—	—	—	—	—	—	—
Total Exploratory Tests	4	3 588	18	9 752	22	13 340	30	22 404	1	890	53	36 634
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	9	1 896
Development Wells	6	4 585	28	13 523	34	18 108	19	11 443	—	—	53	29 551
Project Wells	—	—	—	—	—	—	—	—	—	—	—	—
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	8	3 809
Total Completions	10	8 173	46	23 275	56	31 448	49	33 847	1	890	123	71 890
EAST COAST OFFSHORE												
New Field Wildcats	1	2 525	—	—	1	2 525	2	6 660	—	—	3	9 185
New Pool Wildcats	—	—	—	—	—	—	1	3 028	—	—	1	3 028
Deeper Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	—	—	—	—	—	—	—	—	—	—	—	—
Total Exploratory Tests	1	2 525	—	—	1	2 525	3	9 688	—	—	4	12 213
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	—	—
Development Wells	2	5 459	—	—	2	5 459	—	—	—	—	2	5 459
Project Wells	—	—	—	—	—	—	—	—	—	—	—	—
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	1	1 075
Total Completions	3	7 984	—	—	3	7 984	3	9 688	—	—	7	18 747
QUEBEC												
New Field Wildcats	—	—	—	—	—	—	1	290	—	—	1	290
New Pool Wildcats	—	—	—	—	—	—	—	—	—	—	—	—
Deeper Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	—	—	—	—	—	—	—	—	—	—	—	—
Total Exploratory Tests	—	—	—	—	—	—	1	290	—	—	1	290
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	—	—
Development Wells	—	—	—	—	—	—	—	—	—	—	—	—
Project Wells	—	—	—	—	—	—	—	—	—	—	—	—
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	—	—
Total Completions	—	—	—	—	—	—	1	290	—	—	1	290

1991 DRILLING COMPLETIONS — CANADA

	OIL		GAS		TOTAL PRODUCERS		ABANDONED		SUSPENDED		TOTAL	
	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres	No.	Metres
EASTERN CANADA												
New Field Wildcats	1	2 525	—	—	1	2 525	3	6 950	—	—	4	9 475
New Pool Wildcats	4	3 588	18	9 752	22	13 340	31	25 432	1	890	54	39 662
Deeper Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	—	—	—	—	—	—	—	—	—	—	—	—
Total Exploratory Tests	5	6 113	18	9 752	23	15 865	34	32 382	1	890	58	49 137
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	9	1 896
Development Wells	8	10 044	28	13 523	36	23 567	19	11 443	—	—	55	35 010
Project Wells	—	—	—	—	—	—	—	—	—	—	—	—
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	9	4 884
Total Completions	13	16 157	46	23 275	59	39 432	53	43 825	1	890	131	90 927
CANADA												
New Field Wildcats	17	25 528	30	59 633	47	85 161	71	104 895	1	2 387	119	192 443
New Pool Wildcats	132	197 022	265	369 461	397	566 483	448	638 888	3	7 880	848	1 213 251
Deeper Pool Tests	113	140 979	111	162 095	224	303 074	188	231 639	3	4 036	415	538 749
Shallower Pool Tests	—	—	—	—	—	—	—	—	—	—	—	—
Outposts	205	278 547	314	343 246	519	621 793	339	455 368	2	1 627	860	1 078 788
Total Exploratory Tests	467	642 076	720	934 435	1 187	1 576 511	1 046	1 430 790	9	15 930	2 242	3 023 231
Stratigraphic Tests	—	—	—	—	—	—	—	—	—	—	9	1 896
Development Wells	1 621	1 981 753	971	823 050	2 592	2 804 803	454	537 685	10	16 773	3 056	3 359 261
Project Wells	32	17 815	—	—	32	17 815	49	13 682	—	—	97	37 878*
Service & Misc. Wells	—	—	—	—	—	—	—	—	—	—	135	147 838
Total Completions	2 120	2 641 644	1 691	1 757 485	3 811	4 399 129	1 549	1 982 157	19	32 703	5 539	6 570 104

* Includes Project Services Wells.

APRIL 1992

1991 DRILLING COMPLETIONS — CANADA

The following classifications are used by the Canadian Committee on Statistics of Drilling. These classes were designed to permit a test to be characterized by the general degree of risk assumed by the operator. There are five exploratory classes, of which the class "new field wildcat" represent the highest level of risk. A well classed as "development" is lower in risk than any of the exploratory wells.

NEW FIELD WILDCAT: A new field wildcat is a test located on a structural feature or other type of trap which has not previously produced oil or gas. In regions where local geological conditions have little or no control over accumulations, these tests are generally at least three kilometres from the nearest productive area. Distance, however, is not the determining factor. Of greater importance is the degree of risk assumed by the operator, and his intention to test a structure or stratigraphic condition not previously proved productive.

NEW POOL WILDCAT: A new pool wildcat is a test located to explore for a new pool on a structural feature or other type of trap already producing oil or gas, but outside the known limits of the presently producing area. In some regions where local geological conditions exert an almost negligible control, exploratory holes of this type may be called "near wildcats". Such wells will usually be less than three kilometres from the nearest productive area.

DEEPER POOL TEST: A deeper pool test is an exploratory hole located within the productive area of a pool, or pools, already partly or wholly developed. It is drilled below the deepest productive pool in order to explore for deeper unknown prospects. All metres drilled are assigned to the exploratory category. This practise was adopted commencing with the 1979 data. Previously, metres drilled were split between the exploratory and development category.

SHALLOWER POOL TEST: A shallower pool test is an exploratory test drilled in search of a new productive reservoir, unknown but possibly suspected from data secured from other wells, and shallower than known productive pools. This test is located within the productive area of a pool or pools previously developed.

OUTPOSTS: An outpost is a test located and drilled with the expectation of extending for a considerable distance the productive area of a partly developed pool. It is usually two or more locations distant from the nearest productive site.

DEVELOPMENT WELL: A development well is a well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive. If the well is completed for production, it is classified as an oil or gas development well. If the well is not completed for production and is abandoned, it is classified as a dry development hole.

PROJECT WELLS: A project well is a well drilled within a designated oil sands area or like deposit for the purpose of producing raw bitumen from the deposit. Such wells may be drilled for pilot, experimental or commercial projects.

STRATIGRAPHIC TEST: A stratigraphic test is a drilling effort, geologically directed, to obtain information pertaining to a specific geological condition that might lead toward the discovery of an accumulation of hydrocarbons. Such tests are customarily drilled without the intention of being completed for hydrocarbon production. This classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration.

SERVICE WELL: A service well is a well drilled or completed for the purpose of supporting production in an existing field. Wells of this class are drilled for the following specific purposes: gas injection (natural gas, propane, butane), water injection, air injection, steam injection, salt water disposal, water supply for injection, observation, etc.

MISCELLANEOUS WELLS: This classification includes storage wells (natural gas, propane, butane), salt brine wells and other wells not classified under categories above.

The 1991 drilling completions exclude junked and abandoned holes as follows:

1991 JUNKED HOLES

Province	No.	Metres
Alberta	6	6 327
Ontario	1	344
	7	6 671

WELLS AND METRES DRILLED IN WESTERN CANADA

	EXPLORATORY		DEVELOPMENT		TOTAL	
	No.	Metres	No.	Metres	No.	Metres
Cum. to 1947	1 118	900 861	950	1 239 858	2 068	2 140 719
1947	129	125 953	202	160 688	331	286 641
1948	179	208 307	281	340 034	460	548 341
1949	275	352 126	580	669 524	855	1 021 650
1950	311	410 170	859	946 081	1 170	1 356 251
1951	487	652 801	933	1 135 229	1 420	1 788 030
1952	900	1 084 089	1 282	1 571 582	2 182	2 655 671
1953	905	1 157 247	1 334	1 628 611	2 239	2 785 858
1954	928	1 216 705	1 365	1 575 051	2 293	2 791 756
1955	885	1 212 529	2 050	2 663 245	2 935	3 875 774
1956	899	1 342 829	2 383	3 379 146	3 282	4 721 975
1957	1 058	1 516 179	1 942	2 753 686	3 000	4 269 865
1958	849	1 275 048	1 667	2 502 804	2 516	3 777 852
1959	939	1 397 939	1 629	2 476 581	2 568	3 874 520
1960	818	1 335 657	1 718	2 854 036	2 536	4 189 693
1961	769	1 302 665	1 743	2 888 582	2 512	4 191 247
1962	869	1 397 234	1 640	2 563 288	2 509	3 960 522
1963	1 011	1 579 464	1 850	2 751 836	2 861	4 331 300
1964	1 293	1 833 748	2 007	2 910 220	3 300	4 743 968
1965	1 470	2 078 430	2 163	2 894 937	3 633	4 973 367
1966	1 447	2 050 160	1 605	2 143 615	3 052	4 193 775
1967	1 341	1 913 449	1 537	1 959 486	2 878	3 872 935
1968	1 495	2 257 325	1 500	1 886 373	2 995	4 143 698
1969	1 624	2 149 223	1 553	1 886 851	3 177	4 036 074
1970	1 414	1 884 488	1 522	1 610 239	2 936	3 494 727
1971	1 445	1 861 534	1 489	1 579 190	2 934	3 440 724
1972	1 649	2 176 651	1 936	1 968 887	3 585	4 145 538
1973	2 126	2 403 485	2 271	2 465 742	4 397	4 869 227
1974	1 648	1 971 296	2 319	2 237 618	3 967	4 208 914
1975	1 565	1 715 655	2 467	2 315 283	4 032	4 030 938
1976	2 389	2 301 411	3 104	3 021 340	5 493	5 322 751
1977	2 739	2 803 393	3 237	3 238 430	5 976	6 041 823
1978	3 065	3 529 465	3 913	3 751 819	6 978	7 281 284
1979	2 901	4 111 269	4 554	4 463 970	7 455	8 575 239
1980	3 744	5 234 229	5 188	5 138 500	8 932	10 372 729
1981	3 074	4 257 685	3 897	3 810 523	6 971	8 068 208
1982	2 288	3 161 028	4 093	3 963 678	6 381	7 124 706
1983	1 973	2 804 879	4 877	5 153 549	6 850	7 958 428
1984	2 863	3 977 174	6 517	6 567 178	9 380	10 544 352
1985	3 296	4 611 664	8 794	8 596 464	12 090	13 208 128
1986	1 955	2 836 782	3 730	4 347 112	5 685	7 183 894
1987	2 322	3 434 838	4 518	4 959 110	6 840	8 393 948
1988	2 889	4 025 708	5 652	5 855 401	8 541	9 881 109
1989	2 525	3 341 228	3 015	3 132 092	5 540	6 473 320
1990	2 731	3 565 913	3 111	3 317 434	5 842	6 883 347
1991	2 184	2 974 094	3 082	3 355 748	5 266	6 329 842
	74 784	99 734 007	118 059	132 630 651	192 843	232 364 658

Project Wells included with Develcpment on this page.

CANADIAN DRILLING COMPLETIONS

	1991	
	Wells	**Metres**
British Columbia	237	419 330
Alberta	3 973	4 873 164
Saskatchewan	1 133	1 120 446
Manitoba	57	51 153
Northwest Territories	8	15 084
Westcoast Offshore	—	—
Eastcoast Offshore	7	18 747
Other Eastern Canada	124	72 180
Total	5 539	6 570 104

NOTE: Prior to 1976, provincial totals have been adjusted for Deeper Pool Tests to reconcile with the Canada total.
From 1976 to 1978, adjustments were already made within each province.
Subsequent to 1978, Deeper Pool Tests are counted as an exploratory well with no adjustment.

APRIL 1992

REPORT OF THE RESERVES COMMITTEE OF THE CANADIAN PETROLEUM ASSOCIATION

CONVENTIONAL CRUDE OIL

Thousand Cubic Metres

	Established Reserves
Remaining Reserves at 1990-12-31	887 957
Gross Additions in 1991	22 359
Reserves at 1990-12-31 plus 1991 Gross Additions	910 316
Less 1991 Production*	69 014
Remaining Reserves at 1991-12-31	841 302
Net Change in Reserves during 1991	-46 655

PENTANES PLUS

Thousand Cubic Metres

Remaining Reserves at 1990-12-31	132 802
Gross Additions in 1991	13 377
Reserves at 1990-12-31 plus 1991 Gross Additions	146 179
Less 1991 Production*	6 964
Remaining Reserves at 1991-12-31	139 215
Net Change in Reserves during 1991	6 413

TOTAL CONVENTIONAL CRUDE OIL & EQUIVALENT

Thousand Cubic Metres

Remaining Reserves at 1990-12-31	1 020 759
Gross Additions in 1991	35 736
Reserves at 1990-12-31 plus 1991 Gross Additions	1 056 495
Less 1991 Production*	75 978
Remaining Reserves at 1991-12-31	980 517
Net Change in Reserves during 1991	-40 242

LIQUIFIED PETROLEUM GASES

(Ethane, Propane & Butanes)

Thousand Cubic Metres

Remaining Reserves at 1990-12-31	228 049
Gross Additions in 1991	28 035
Reserves at 1990-12-31 plus 1991 Gross Additions	256 084
Less 1991 Production*	12 171
Remaining Reserves at 1991-12-31	243 913
Net Change in Reserves during 1991	15 864

MARKETABLE NATURAL GAS

Million Cubic Metres at 101.325 kPa and 15°C

Remaining Reserves at 1990-12-31	2 725 390
Gross Additions in 1991	96 231
Reserves at 1990-12-31 plus 1991 Gross Additions	2 821 621
Less 1991 Production*	110 752
Remaining Reserves at 1991-12-31	2 710 869
Net Change in Reserves during 1991	-14 521

* Preliminary estimate - see note at end of table

JULY 1992

SULPHUR

Thousand Tonnes

	Established Reserves
Recoverable From Natural Gas Reserves	
Remaining Reserves at 1990-12-31	104 991
Gross Additions in 1991	2 238
Reserves at 1990-12-31 plus 1991 Gross Additions	107 229
Less 1991 Production*	5 489
Remaining Reserves at 1991-12-31	101 740
Net Change in Reserves during 1991	-3 251
Recoverable From Developed Synthetic Crude Oil Reserves	
Remaining Reserves at 1990-12-31	12 849
Gross Additions in 1991	1 200
Reserves at 1990-12-31 plus 1991 Gross Additions	14 049
Less 1991 Production*	550
Remaining Reserves at 1991-12-31	13 499
Net Change in Reserves during 1991	650

. . .

Developed synthetic crude oil & sulphur reserves are calculated on the basis of each plant's developed capacity over the approved period.

DEVELOPED SYNTHETIC CRUDE OIL

Thousand Cubic Metres

Remaining Reserves at 1990-12-31	313 864
Gross Additions in 1991	20 100
Reserves at 1990-12-31 plus 1991 Gross Additions	333 964
Less 1991 Production*	13 227
Remaining Reserves at 1991-12-31	320 737
Net Change in Reserves during 1991	6 873

. . .

Developed bitumen reserves are those recovered from developed experimental/demonstration and commercial projects.

DEVELOPED BITUMEN

Thousand Cubic Metres

Remaining Reserves at 1990-12-31	174 591
Gross Additions in 1991	-3 154
Reserves at 1990-12-31 plus 1991 Gross Additions	171 437
Less 1991 Production*	7 113
Remaining Reserves at 1991-12-31	164 324
Net Change in Reserves during 1991	-10 267

* All 1991 production figures are preliminary estimates. Any variance between the actual production, as later reported, and the figures used herein will be included under additions when the following year's reserves report is compiled. Therefore, correct total cumulative net production cannot be obtained by adding together the figures listed in successive reports of the Committee, but should be obtained from tabulations in the Association's Statistical Handbook.

Committee Members:

R.V. Lang, Chairman
M. Lochli, Vice-chairman
M. Simpson, Vice-chairman
S.P. Rodrigues, Secretary

P. Andrews
P. Bagnall
T. Body
J. Brand
F. Brown
M. Cimolai
D. King
P. Leroux
A. Langenhan
K. Lawrence
R. Legere
B. McFadzean
T. Nazarko
D.J. Nicoll
D. Parliament
D.P. Searl
J. Van Leeuwen
A. Wootton

CONVENTIONAL CRUDE OIL & EQUIVALENT
REMAINING ESTABLISHED RESERVES IN CANADA

Thousand Cubic Metres

Regions	Remaining Reserves at 1990-12-31 (1)	1991 Gross Additions (2)	1991 Net Production* (3)	Remaining Reserves at 1991-12-31 (4)	Net Change in Reserves during 1991 (5)
CRUDE OIL					
Conventional Areas					
British Columbia	17 566	2 061	1 965	17 662	96
Alberta	530 205	11 836	52 082	489 959	-40 246
Saskatchewan	116 896	5 557	12 117	110 336	-6 560
Manitoba	8 351	146	691	7 806	-545
Ontario	1 414	144	235	1 323	-91
Quebec	0	0	0	0	0
New Brunswick	5	0	0	5	0
Total Conventional Areas	674 437	19 744	67 090	627 091	-47 346
Frontier Areas**					
Mainland Territories	20 893	2 615	1 899	21 609	716
Mackenzie/Beaufort	53 950	0	0	53 950	0
Arctic Islands	77	0	25	52	-25
Eastcoast Offshore	138 600	0	0	138 600	0
Total Frontier Areas	213 520	2 615	1 924	214 211	691
TOTAL CRUDE OIL	887 957	22 359	69 014	841 302	-46 655
PENTANES PLUS					
Conventional Areas					
British Columbia	4 024	905	248	4 681	657
Alberta	109 636	11 845	6 600	114 881	5 245
Saskatchewan	503	2	28	477	-26
Manitoba	24	0	2	22	-2
Ontario	0	0	0	0	0
Quebec	0	0	0	0	0
New Brunswick	0	0	0	0	0
Total Conventional Areas	114 187	12 752	6 878	120 061	5 874
Frontier Areas**					
Mainland Territories	327	625	86	866	539
Mackenzie/Beaufort	11 671	0	0	11 671	0
Arctic Islands	6 617	0	0	6 617	0
Eastcoast Offshore	0	0	0	0	0
Total Frontier Areas	18 615	625	86	19 154	539
TOTAL PENTANES PLUS	132 802	13 377	6 964	139 215	6 413
TOTAL CRUDE OIL & EQUIV	1 020 759	35 736	75 978	980 517	-40 242

*Preliminary estimate. Corrections to previous year cumulative production included with gross additions.

**Frontier reserves are carried in accordance with the definition of established reserves. In addition, a threshold volume is required to have been developed in any particular frontier area.

JULY 1992

SECTION II
Table 1

MARKETABLE NATURAL GAS
REMAINING ESTABLISHED RESERVES IN CANADA

Million Cubic Metres at 101.325 kPa and 15°C

Regions	Remaining Reserves at 1990-12-31 (1)	1991 Gross Additions (2)	1991 Net Production* (3)	Remaining Reserves at 1991-12-31 Non-Assoc. (4)	Assoc./Soln. (5)	Remaining Reserves (6)	Net Changes in Reserves during 1991 (7)
NATURAL GAS							
Conventional Areas							
British Columbia	223 638	19 351	13 774	221 142	8 073	229 215	5 577
Alberta	1 689 884	77 964	89 295	1 400 004	278 549	1 678 553	-11 331
Saskatchewan	78 880	-1 444	6 254	68 680	2 502	71 182	-7 698
Manitoba	0	0	0	0	0	0	0
Ontario	16 903	935	1 120	16 718	0	16 718	-185
Quebec	67	0	0	67	0	67	0
New Brunswick	5	0	0	0	5	5	0
Total Conventional Areas	2 009 377	96 806	110 443	1 706 611	289 129	1 995 740	-13 637
Frontier Areas**							
Mainland Territories	10 913	-575	309	9 392	637	10 029	-884
Mackenzie/Beaufort	298 730	0	0	274 430	24 300	298 730	0
Arctic Islands	406 370	0	0	377 040	29 330	406 370	0
Eastcoast Offshore	0	0	0	0	0	0	0
Total Frontier Areas	716 013	-575	309	660 862	54 267	715 129	-884
TOTAL MARKETABLE NATURAL GAS	2 725 390	96 231	110 752	2 367 473	343 396	2 710 869	-14 521

*Preliminary estimate. Includes injection and withdrawal from storage facility (note Ontario). Production is adjusted for injection including gas cycling and hydrocarbon miscible floods. Corrections to previous year cumulative production included with gross additions.

**Frontier reserves are carried in accordance with the definition of established reserves. In addition, a threshold volume is required to have been developed in any particular frontier area.

LIQUIFIED PETROLEUM GASES
REMAINING ESTABLISHED RESERVES IN CANADA

Thousand Cubic Metres

Regions	Remaining Reserves at 1990-12-31 (1)	1991 Gross Additions (2)	1991 Net Production* (3)	Remaining Reserves at 1991-12-31 (4)	Net Change in Reserves during 1991 (5)
ETHANE, PROPANE & BUTANES					
Conventional Areas					
British Columbia	6 346	815	434	6 727	381
Alberta	220 182	27 166	11 590	235 758	15 576
Saskatchewan	1 473	54	142	1 385	-88
Manitoba	48	0	5	43	-5
Ontario	0	0	0	0	0
Quebec	0	0	0	0	0
New Brunswick	0	0	0	0	0
Total Conventional Areas	228 049	28 035	12 171	243 913	15 864
Frontier Areas**					
Mainland Territories	0	0	0	0	0
Mackenzie/Beaufort	0	0	0	0	0
Arctic Islands	0	0	0	0	0
Eastcoast Offshore	0	0	0	0	0
Total Frontier Areas	0	0	0	0	0
TOTAL LIQUIFIED PETROLEUM GASES	228 049	28 035	12 171	243 913	15 864

*Preliminary estimate. Corrections to previous year cumulative production included with gross additions. Production is adjusted for injection of hydrocarbon into miscible floods.

**Frontier reserves are carried in accordance with the definition of established reserves. In addition, a threshold volume is required to have been developed in any particular frontier area.

SULPHUR
REMAINING ESTABLISHED RESERVES IN CANADA

Thousand Tonnes

Regions	Remaining Reserves at 1990-12-31 (1)	1991 Gross Additions (2)	1991 Net Production* (3)	Remaining Reserves at 1991-12-31 (4)	Net Change in Reserves during 1991 (5)
RECOVERABLE FROM NATURAL GAS RESERVES					
British Columbia	9 143	149	452	8 840	-303
Alberta	95 848	2 089	5 037	92 900	-2 948
	104 991	2 238	5 489	101 740	-3 251
RECOVERABLE FROM DEVELOPED SYNTHETIC CRUDE OIL RESERVES					
Alberta	12 849	1 200	550	13 499	650
	117 840	3 438	6 039	115 239	-2 601

*Preliminary estimate. Corrections to previous year cumulative production included with gross additions.

**Frontier reserves are carried in accordance with the definition of established reserves. In addition, a threshold volume is required to have been developed in any particular frontier area.

JULY 1992

SECTION II
Table 4

DEVELOPED NON-CONVENTIONAL OIL
REMAINING ESTABLISHED RESERVES IN CANADA

Thousand Cubic Metres

Regions	Remaining Reserves at 1990-12-31 (1)	1991 Gross Additions (2)	1991 Net Production* (3)	Remaining Reserves at 1991-12-31 (4)	Net Change in Reserves during 1991 (5)
DEVELOPED SYNTHETIC CRUDE OIL					
Alberta	313 864	20 100	13 227	320 737	6 873

Developed synthetic crude oil reserves are calculated on the basis of each plant's developed capacity over the approved period.

DEVELOPED BITUMEN					
Alberta	174 591	-3 154	7 113	164 324	-10 267

Developed bitumen reserves are those recoverable from developed experimental/demonstration and commercial projects.

* Preliminary Estimate. Corrections to previous year cumulative production included with gross additions.

JULY 1992

SECTION II
Table 5

CRUDE OIL
HISTORICAL RECORD OF REMAINING ESTABLISHED RESERVES IN CANADA

Thousand Cubic Metres

YEAR	*Remaining at Beginning of Year* (1)	*Gross Additions* (2)	*Net Production*** (3)	*Remaining at End of Year* (4)	*Net Change in Reserves during Year* (5)
1951*	191 106	35 169	7 519	218 756	27 650
1952*	218 756	57 749	9 614	266 891	48 135
1953*	266 891	39 222	12 857	293 256	26 365
1954*	293 256	72 750	15 194	350 812	57 556
1955*	350 812	68 240	20 262	398 790	47 978
1956*	398 790	80 910	26 907	452 793	54 003
1957*	452 793	32 868	28 882	456 779	3 986
1958*	456 779	72 701	26 386	503 094	46 315
1959*	503 094	81 832	29 198	555 728	52 634
1960*	555 728	59 197	30 368	584 557	28 829
1961*	584 557	113 788	35 123	663 222	78 665
1962*	663 222	87 720	38 914	712 028	48 806
Break in Series					
1963	1 062 733	13 944	40 758	1 035 919	-26 814
1964	1 035 919	255 384	43 033	1 248 270	212 351
1965	1 248 270	196 556	46 337	1 398 489	150 219
1966	1 398 489	208 887	50 224	1 557 152	158 663
1967	1 557 152	124 587	54 690	1 627 049	69 897
1968	1 627 049	93 668	59 030	1 661 687	34 638
1969	1 661 687	66 636	62 516	1 665 807	4 120
1970	1 665 807	26 894	69 606	1 623 095	-42 712
1971	1 623 095	37 636	76 297	1 584 434	-38 661
1972	1 584 434	22 229	82 319	1 524 344	-60 090
1973	1 524 344	6 537	99 423	1 431 458	-92 886
1974	1 431 458	-5 065	95 530	1 330 863	-100 595
1975	1 330 863	-6 280	79 897	1 244 686	-86 177
1976	1 224 686	5 921	69 683	1 180 924	-63 762
1977	1 180 924	10 227	70 872	1 120 279	-60 645
1978	1 120 279	37 426	67 647	1 090 058	-30 221
1979	1 090 058	71 415	79 469	1 082 004	-8 054
1980	1 082 004	-56 247	74 529	951 228	-130 776
1981	951 228	178 220	65 873	1 063 575	112 347
1982	1 063 575	19 341	61 756	1 021 133	-42 442
1983	1 021 133	66 074	64 488	1 022 719	1 586
1984	1 022 719	-588	73 108	949 023	-73 696
1985	949 023	39 837	73 030	915 830	-33 193
1986	915 830	98 719	70 138	944 411	28 581
1987	944 411	67 943	72 192	940 162	-4 249
1988	940 162	108 468	73 482	975 148	34 986
1989	975 148	31 677	68 832	937 993	-37 155
1990	937 993	18 350	68 386	887 957	-50 036
1991	887 957	22 359	69 014	841 302	-46 655

* Proved reserves.

** Preliminary estimate. Corrections to previous year cumulative production included with gross additions.

NOTE: East Coast Offshore reserves booked for first time in 1981.
Arctic Islands reserves booked for first time in 1985.
Mackenzie Delta/Beaufort Sea booked for first time in 1986.

MARKETABLE NATURAL GAS
HISTORICAL RECORD OF REMAINING ESTABLISHED RESERVES IN CANADA

Million Cubic Metres at 101.325 kPa and 15°C

YEAR	*Remaining at Beginning of Year* (1)	*Gross Additions* (2)	*Net Change in Underground Storage*** (3)	*Net Production**** (4)	*Remaining at End of Year* (5)	*Net Change in Reserves during Year* (6)
1955*	355 802	60 724	102	4 110	412 518	56 716
1956*	412 518	79 089	117	5 426	486 298	73 780
1957*	486 298	34 215	79	6 862	513 730	27 432
1958*	513 730	72 877	60	9 437	577 230	63 500
1959*	577 230	94 059	966	12 347	659 908	82 678
1960*	659 908	113 847	153	13 378	760 530	100 622
1961*	760 530	91 169	-8	19 544	832 147	71 617
1962*	832 147	70 930	-11	23 554	879 512	47 365
1963*	879 512	74 749	721	25 459	929 523	50 011
Break in Series						
1964	1 054 466	257 146	782	28 436	1 283 958	229 492
1965	1 283 958	62 203	-218	30 642	1 315 301	31 343
1966	1 315 301	110 766	505	31 704	1 394 868	79 567
1967	1 394 868	86 355	116	34 262	1 447 077	52 209
1968	1 447 077	136 443	-35	39 300	1 544 185	97 108
1969	1 544 185	137 938	62	43 854	1 638 331	94 146
1970	1 638 331	128 611	569	50 690	1 716 821	78 490
1971	1 716 821	101 860	2	55 027	1 763 656	46 835
1972	1 763 656	21 822	-157	63 329	1 721 992	-41 664
1973	1 721 992	70 228	1 975	65 514	1 728 681	6 689
1974	1 728 681	169 925	294	67 434	1 831 466	102 785
1975	1 831 466	261 729	842	66 522	2 027 515	196 049
1976	2 027 515	209 181	-311	71 595	2 164 790	137 275
1977	2 164 790	134 970	1 316	70 234	2 230 842	66 052
1978	2 230 842	157 213	97	65 939	2 322 213	91 371
1979	2 322 213	247 681	299	74 136	2 496 057	173 844
1980	2 496 057	66 784	-936	70 041	2 491 864	-4 193
1981	2 491 864	138 614	264	67 769	2 562 973	71 109
1982	2 562 973	95 498	2 069	69 490	2 591 050	28 077
1983	2 591 050	87 478	-3 226	62 707	2 612 595	21 545
1984	2 612 595	275 000	.....	79 014	2 808 581	195 986
1985	2 808 581	57 764	.....	82 422	2 783 923	-24 658
1986	2 783 923	38 554	.....	76 967	2 745 510	-38 413
1987	2 745 510	27 141	.....	79 868	2 692 783	-52 727
1988	2 692 783	78 870	.....	101 108	2 670 545	-22 238
1989	2 670 545	163 947	.....	102 043	2 732 449	61 904
1990	2 732 449	99 637	.....	106 696	2 725 390	-7 059
1991	2 725 390	96 231	.....	110 752	2 710 869	-14 521

* Proved reserves.

** Effective 1984, change in underground storage is included in net production.

*** Preliminary estimate. Includes injection and withdrawl from storage facility and is adjusted for injection including gas cycling and hydrocarbon miscible floods. Corrections to previous year cumulative production included with gross additions.

NOTE: Marketable gas reserves prior to 1963 have been derived by statistical conversion of the original estimates of "recoverable" gas reserves.
Mackenzie Delta gas reserves included for first time in 1974.
Arctic Islands gas reserves included for first time in 1975.

NATURAL GAS LIQUIDS
HISTORICAL RECORD OF REMAINING ESTABLISHED RESERVES IN CANADA

Thousand Cubic Metres

YEAR	*Remaining at Beginning of Year* (1)	*Gross Additions* (2)	*Net Production*** (3)	*Remaining at End of Year* (4)	*Net Change in Reserves during Year* (5)
1952*	1 802	8 677	98	10 381	8 579
1953*	10 381	21 279	198	31 462	21 081
1954*	31 462	1 851	230	33 083	1 621
1955*	33 083	6 535	381	39 237	6 154
1956*	39 237	5 639	422	44 454	5 217
1957*	44 454	18 698	480	62 672	18 218
1958*	62 672	14 997	779	76 890	14 218
1959*	76 890	3 911	1 060	79 741	2 851
1960*	79 741	7 134	1 358	85 517	5 776
1961*	85 517	8 080	2 182	91 415	5 898
1962*	91 415	22 744	3 737	110 422	19 007
Break in Series					
1963	130 962	4 160	4 345	130 777	-185
1964	130 777	33 444	6 532	157 689	26 912
1965	157 689	8 333	7 555	158 467	778
1966	158 467	59 803	7 874	210 396	51 929
1967	210 396	13 331	9 001	214 726	4 330
1968	214 726	40 856	9 730	245 852	31 126
1969	245 852	41 834	10 530	277 156	31 304
1970	277 156	21 639	12 529	286 266	9 110
1971	286 266	-14 008	13 454	258 804	-27 462
1972	258 804	7 588	16 458	249 934	-8 870
1973	249 934	5 648	17 767	237 815	-12 119
1974	237 815	26 165	17 239	246 741	8 926
1975	246 741	11 850	16 862	241 729	-5 012
1976	241 729	13 878	16 826	238 781	-2 948
1977	238 781	6 669	17 940	227 510	-11 271
1978	227 510	15 216	13 064	229 662	2 152
1979	229 662	-9 231	13 393	207 038	-22 624
1980	207 038	9 211	13 103	203 146	-3 892
1981	203 146	2 816	12 169	193 793	-9 353
1982	193 793	15 579	11 394	197 978	4 185
1983	197 978	15 252	10 453	202 777	4 799
1984	202 777	64 558	14 422	252 913	50 136
1985	252 913	82 748	14 904	320 757	67 844
1986	320 757	33 018	14 990	338 785	18 028
1987	338 785	23 795	14 465	348 115	9 330
1988	348 115	18 629	18 545	348 199	84
1989	348 199	38 609	19 509	367 299	19 100
1990	367 299	11 450	17 898	360 851	-6 448
1991	360 851	41 412	19 135	383 128	22 277

* Proved reserves.

** Preliminary estimate. Corrections to previous year cumulative production included with gross additions. Production is adjusted for injection in hydrocarbon miscible floods.

NOTE: Mackenzie Delta natural gas liquids reserves included for first time in 1974.

SULPHUR
HISTORICAL RECORD OF REMAINING ESTABLISHED RESERVES IN CANADA

Thousand Tonnes

YEAR	*Remaining at Beginning of Year* (1)	*Gross Additions* (2)	*Net Production*** (3)	*Remaining at End of Year* (4)	*Net Change in Reserves during Year* (5)
1959*	47 489	4 402	277	51 614	4 125
1960*	51 614	4 842	442	56 014	4 400
1961*	56 014	3 383	517	58 880	2 866
1962*	58 880	-952	1 043	56 885	-1 995
Break in Series					
1963	62 286	2 767	1 259	63 794	1 508
1964	63 794	27 077	1 502	89 369	25 575
1965	89 369	-3 118	1 562	84 689	-4 680
1966	84 689	21 504	1 701	104 492	19 803
1967	104 492	7 816	2 128	110 180	5 688
1968	110 180	19 505	2 978	126 707	16 527
1969	126 707	17 789	3 532	140 904	14 197
1970	140 904	31 695	4 195	168 404	27 500
1971	168 404	5 139	4 376	169 167	763
1972	169 167	4 116	5 072	168 211	-956
1973	168 211	-3 260	6 424	158 527	-9 684
1974	158 527	-16 170	6 775	135 582	-22 945
1975	135 582	-14 728	6 242	114 612	-20 970
1976	114 612	5 087	6 381	113 318	-1 294
1977	113 318	13 051	6 329	120 040	6 722
1978	120 040	4 696	5 275	119 461	-579
1979	119 461	-4 223	5 795	109 443	-10 018
1980	109 443	-727	5 487	103 229	-6 214
1981	103 229	-1 187	4 987	97 055	-6 174
1982	97 055	1 243	4 742	93 556	-3 499
1983	93 556	1 607	3 746	91 417	-2 139
1984	91 417	3 520	5 257	89 680	-1 737
1985	89 680	10 136	5 202	94 614	4 934
1986	94 614	-3 305	5 161	86 148	-8 466
1987	86 148	21 485	5 269	102 364	16 216
1988	102 364	8 460	8 021	102 803	439
1989	102 803	5 055	5 005	102 853	50
1990	102 853	7 275	5 137	104 991	2 138
1991	104 991	2 238	5 489	101 740	-3 251

* Proved reserves.

** Preliminary Estimate. Corrections to previous year cumulative production included with gross additions.

NOTE: Sulphur recoverable from natural gas reserves only.

HISTORICAL DEVELOPED NON-CONVENTIONAL RESERVES
DEVELOPED SYNTHETIC CRUDE OIL

Thousand Cubic Metres

YEAR	*Remaining at Beginning of Year* (1)	*Gross Additions* (2)	*Net Production** (3)	*Remaining at End of Year* (4)	*Net Change in Reserves during Year* (5)
1968	—	1 009 079	859	1 008 220	1 008 220
1969	1 008 220	-123	1 547	1 006 550	-1 670
1970	1 006 550	-56	1 920	1 004 574	-1 976
1971	1 004 574	—	2 476	1 002 098	-2 476
1972	1 002 098	7	2 991	999 114	-2 984
1973	999 114	—	2 931	996 183	-2 931
1974	996 183	—	2 682	993 501	-2 682
Break in Series**					
1975	993 501	-748 466	2 505	242 530	-750 971
1976	242 529	—	2 809	239 720	-2 809
1977	239 720	—	2 640	237 080	-2 640
1978	237 080	—	3 762	233 318	-3 762
1979	233 318	7 938	5 349	235 907	2 589
1980	235 907	20	7 410	228 517	-7 390
1981	228 517	—	6 446	222 071	-6 446
1982	222 071	—	6 959	215 112	-6 959
1983	215 112	—	9 258	205 854	-9 258
Break in Series**					
1984	205 854	67 900	7 782	265 972	60 118
1985	265 972	—	9 745	256 227	-9 745
Break in Series**					
1986	256 227	15 352	10 758	260 821	4 594
1987	260 821	12 860	10 423	263 258	2 437
1988	263 258	41 400	11 691	292 967	29 709
1989	292 967	45 000	11 975	325 992	33 025
1990	325 992	—	12 128	313 864	-12 128
1991	313 864	20 100	13 227	320 737	6 873

* Preliminary estimate. Corrections to previous year cumulative production included with gross additions.

** New procedure adopted for estimating oil sands reserves commencing with the 1975, 1984 and 1986 report.

CRUDE OIL IN CANADA BY TYPE
AT 1991-12-31

Thousand Cubic Metres

INITIAL VOLUME IN-PLACE

OIL TYPE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
LIGHT	87499	173000	750	285650	6914797	1890322	169538	56703	2860	615400	10196519
MEDIUM	0	0	0	0	0	0	0	0	0	0	0
HEAVY	0	0	0	0	1509186	1423256	5720	0	0	0	2938162
TOTAL	87499	173000	750	285650	8423983	3313578	175258	56703	2860	615400	13134681

INITIAL ESTABLISHED RESERVES

OIL TYPE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
LIGHT	37500	54000	300	92363	2087660	401544	36079	11742	133	138600	2859921
MEDIUM	0	0	0	0	0	0	0	0	0	0	0
HEAVY	0	0	0	0	199584	100000	357	0	0	0	299941
TOTAL	37500	54000	300	92363	2287244	501544	36436	11742	133	138600	3159862

REMAINING ESTABLISHED RESERVES

OIL TYPE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
LIGHT	21609	53950	52	17662	424758	78434	7716	1323	5	138600	744109
MEDIUM	0	0	0	0	0	0	0	0	0	0	0
HEAVY	0	0	0	0	65201	31902	90	0	0	0	97193
TOTAL	21609	53950	52	17662	489959	110336	7806	1323	5	138600	841302

LIQUID HYDROCARBONS
HISTORICAL RECORD OF REMAINING ESTABLISHED RESERVES IN CANADA

Thousand Cubic Metres

REGIONS	1989	1990	1991
Crude Oil			
Mainland Territories (S. 68°N)	22 734	20 893	21 609
British Columbia	18 490	17 566	17 662
Alberta	582 531	530 205	489 959
Saskatchewan	111 909	116 896	110 336
Manitoba	8 349	8 351	7 806
Mackenzie Delta/Beaufort Sea	53 950	53 950	53 950
Arctic Islands	101	77	52
Ontario	1 324	1 414	1 323
Other Eastern Canada	5	5	5
Eastcoast Offshore	138 600	138 600	138 600
Total Crude Oil	937 993	887 957	841 302
Pentanes Plus			
Mainland Territories (S. 68°N)	357	327	866
Mackenzie Delta/Beaufort Sea	11 671	11 671	11 671
Arctic Islands	6 617	6 617	6 617
British Columbia	4 260	4 024	4 681
Alberta	114 157	109 636	114 881
Saskatchewan	498	503	477
Manitoba	26	24	22
Total Pentanes Plus	133 244	132 802	139 215
Liquefied Petroleum Gases (Ethane, Propane & Butanes)			
Mainland Territories (S. 68°N)	—	—	—
British Columbia	6 841	6 346	6 727
Alberta	221 296	220 182	235 758
Saskatchewan	1 522	1 473	1 385
Manitoba	54	48	43
Total Ethane, Propane & Butanes	229 713	228 049	243 913
TOTAL LIQUID HYDROCARBONS	1 300 950	1 248 808	1 224 430

NOTE: East Coast Offshore crude oil reserves booked for first time in 1981.
Arctic Islands crude oil reserves booked for first time in 1985.
Mackenzie Delta/Beaufort Sea booked for first time in 1986.

JULY 1992

SECTION II
Table 12B

MARKETABLE NATURAL GAS
HISTORICAL RECORD OF REMAINING ESTABLISHED RESERVES IN CANADA AT YEAR END

Million Cubic Metres at 101.325 kPa and 15°C

REGIONS	*1985*	*1986*	*1987*	*1988*	*1989*	*1990*	*1991*
Mainland Territories (S. 68°N)	11 372	11 636	11 272	11 205	10 987	10 913	10 029
Makenzie Delta / Beaufort Sea	258 310	258 310	258 310	280 130	298 730	298 730	298 730
Arctic Islands	406 370	406 370	406 370	406 370	406 370	406 370	406 370
British Columbia	243 548	240 307	210 327	210 094	218 393	223 638	229 215
Alberta	1 827 058	1 749 997	1 727 725	1 688 054	1 705 559	1 689 884	1 678 553
Saskatchewan	25 801	61 305	60 705	56 283	74 791	78 880	71 182
Manitoba	—	—	—	—	—	—	—
Ontario	11 310	17 444	17 949	18 311	17 529	16 903	16 718
Other Eastern Canada	154	141	125	98	90	72	72
Total Canada	2 783 923	2 745 510	2 692 783	2 670 545	2 732 449	2 725 390	2 710 869

NOTE: Mackenzie Delta gas reserves included for the first time 1974.
Arctic Islands gas reserves included for the first time in 1975.

JULY 1992

SECTION II
Table 13A

SULPHUR
HISTORICAL RECORD OF REMAINING ESTABLISHED RESERVES IN CANADA AT YEAR END

Thousand Tonnes

REGIONS	1989	1990	1991
British Columbia	8 768	9 143	8 840
Alberta	94 085	95 848	92 900
Saskatchewan	—	—	—
From Natural Gas Reserves	102 853	104 991	101 740
From Developed Synthetic Reserves	13 350	12 849	13 499
Total Canada	116 203	117 840	115 239

* New procedure adopted for estimating oil sands reserves commencing with the 1975, 1984 and 1986 report.

JULY 1992

SECTION II
Table 14A

LIQUID HYDROCARBON RESERVES IN CANADA
INITIAL VOLUME IN PLACE, INITIAL ESTABLISHED & REMAINING ESTABLISHED RESERVES
AT 1991-12-31

Thousand Cubic Metres

REGIONS	*Initial Volume in Place*	*Initial Established Reserves*	*Remaining Established Reserves*
Crude Oil			
Conventional Areas			
British Columbia	285 650	92 363	17 662
Alberta	8 423 983	2 287 244	489 959
Saskatchewan	3 313 578	501 544	110 336
Manitoba	175 258	36 436	7 806
Ontario	56 703	11 742	1 323
Other Eastern Canada	2 860	133	5
Total Conventional Areas	12 258 032	2 929 462	627 091
Frontier Areas			
Mainland Territories (S. 68°N)	87 499	37 500	21 609
Mackenzie Delta/Beaufort Sea	173 000	54 000	53 950
Arctic Islands	750	300	52
Eastcoast Offshore	615 400	138 600	138 600
Total Frontier Areas	876 649	230 400	214 211
Total Crude Oil	13 134 681	3 159 862	841 302

JULY 1992

CRUDE OIL RESERVES IN CANADA ATTRIBUTABLE TO ENHANCED RECOVERY AT 1991-12-31

Thousand Cubic Metres

REGIONS	INITIAL ESTABLISHED RESERVES				
	From Natural Depletion	Additional From Enhanced Recovery			
		Secondary	Tertiary*	Sub-Total	Total
British Columbia	46 969	44 079	1 315	45 394	92 363
Alberta	1 554 529	562 119	170 596	732 715	2 287 244
Saskatchewan	310 280	175 813	15 451	191 264	501 544
Manitoba	23 514	12 922	—	12 922	36 436
Ontario	10 442	1 300	—	1 300	11 742
Other Eastern Canada	133	—	—	—	133
Mainland Territories (S. 68°N)	10 500	27 000	—	27 000	37 500
Mackenzie Delta/Beaufort Sea	26 000	28 000	—	28 000	54 000
Arctic Islands	300	—	—	—	300
Eastcoast Offshore	55 800	82 800	—	82 800	138 600
Total Canada	2 038 467	934 033	187 362	1 121 395	3 159 862

* Reflects type of technology, not tertiary sequence of enhanced recovery application.

JULY 1992

NATURAL GAS RESERVES IN CANADA
INITIAL VOLUME IN PLACE & INITIAL ESTABLISHED RESERVES
AT 1991-12-31

Million Cubic Metres at 101.325 kPa and 15°C

REGIONS	*Initial Volume in Place*	*Initial Established Raw Gas Reserves*	*Initial Established Marketable Gas Reserves*
Conventional Areas			
British Columbia	738 296	555 318	465 023
Alberta	5 711 062	4 099 316	3 396 136
Saskatchewan	238 976	150 054	133 982
Manitoba	—	—	—
Ontario	118 768	43 857	41 387
Other Eastern Canada	1 133	1 090	1 036
Total Conventional Areas	6 808 235	4 849 635	4 037 564
Frontier Areas			
Mainland Territories (S. 68°N)	56 800	23 557	17 529
Mackenzie Delta/Beaufort Sea	407 530	329 203	298 730
Arctic Islands	553 100	428 115	406 370
Eastcoast Offshore	—	—	—
Total Frontier Areas	1 017 430	780 875	722 629
Total Canada	7 825 665	5 630 510	4 760 193

JULY 1992

DEVELOPED NON-CONVENTIONAL RESERVES IN CANADA
INITIAL VOLUME IN PLACE, INITIAL ESTABLISHED & REMAINING ESTABLISHED RESERVES
AT 1991-12-31

REGIONS	*Initial Volume in Place*	*Developed Initial Established Reserves*	*Developed Remaining Established Reserves*
Developed Synthetic Crude Oil			
Thousand Cubic Metres			
Alberta	591 100	468 600	320 737
Total Canada	591 100	468 600	320 737
Sulphur -			
Thousand Tonnes			
Alberta		19 300	13 499
Total Canada		19 300	13 499

Developed synthetic crude oil & sulphur reserves are calculated on the basis of each plant's developed capacity over the approved period.

Developed Bitumen			
Thousand Cubic Metres			
Alberta	1 263 907	215 936	164 324
Total Canada	1 263 907	215 936	164 324

Developed bitumen reserves are those recovered from developed experimental / demonstration and commercial projects

JULY 1992

MARKETABLE NATURAL GAS
REMAINING ESTABLISHED RESERVES IN CANADA BY TYPE
AT 1991-12-31

Million Cubic Metres at 101.325 kPa and 15°C

GAS TYPE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
UNCONNECTED	3556	298730	406370	86784	543118	1206	0	1749	0	0	1341513
CONNECTED	6473	0	0	142431	1135435	69976	0	14969	72	0	1369356
TOTAL	10029	298730	406370	229215	1678553	71182	0	16718	72	0	2710869

CRUDE OIL
INITIAL VOLUME IN-PLACE IN CANADA BY YEAR OF DISCOVERY
AT 1991-12-31

Thousand Cubic Metres

YEAR OF DISCOVERY	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
PRE 1947	87499	0	0	0	425333	0	0	8722	2860	0	524414
1947	0	0	0	0	144245	13732	0	130	0	0	158107
1948	0	0	0	0	239154	14078	0	30	0	0	253262
1949	0	0	0	0	124690	29185	0	5082	0	0	158957
1950	0	0	0	0	150930	9149	0	1200	0	0	161279
1951	0	0	0	0	152250	165443	22064	140	0	0	339897
1952	0	0	0	1370	397220	119071	2448	1200	0	0	521309
1953	0	0	0	221	1292861	252159	73773	600	0	0	1619614
1954	0	0	0	89503	276118	479383	8294	360	0	0	853658
1955	0	0	0	0	90559	191697	13094	500	0	0	295850
1956	0	0	0	4274	139938	343554	500	0	0	0	488266
1957	0	0	0	21037	479775	79761	3176	10	0	0	583759
1958	0	0	0	2570	231526	13200	0	4250	0	0	251546
1959	0	0	0	12955	370694	143004	0	2198	0	0	528851
1960	0	0	0	2671	58235	84860	0	0	0	0	145766
1961	0	0	0	564	173050	31772	120	330	0	0	205836
1962	0	0	0	1647	210324	46819	1309	18421	0	0	278520
1963	0	0	0	9472	202016	189817	50	170	0	0	401525
1964	0	0	0	4360	227941	128104	1775	2220	0	0	364400
1965	0	0	0	35519	247437	81960	1990	250	0	0	367156
1966	0	0	0	223	181230	14100	0	90	0	0	195643
1967	0	0	0	2000	133544	53311	1280	0	0	0	190135
1968	0	0	0	1110	101821	98077	108	0	0	0	201116
1969	0	0	0	252	125962	63316	0	160	0	0	189690
1970	0	0	0	9272	57228	132317	0	520	0	0	199337
1971	0	0	0	3037	54134	64743	0	0	0	0	121914
1972	0	0	0	15194	42707	28581	0	300	0	0	86782
1973	0	0	0	1883	98703	14383	0	200	0	8200	123369
1974	0	0	750	1068	71820	43764	160	10	0	0	117572
1975	0	0	0	689	63545	807	0	0	0	0	65041
1976	0	0	0	26279	57759	15555	0	0	0	0	99593
1977	0	0	0	1328	123074	53296	0	170	0	0	177868
1978	0	0	0	6858	169973	35271	1170	325	0	0	213597
1979	0	0	0	1084	144287	45192	0	200	0	450000	640763
1980	0	0	0	559	132196	35632	30213	30	0	0	198630
1981	0	0	0	348	136215	39514	1184	70	0	0	177331
1982	0	0	0	1818	120061	62006	3777	0	0	0	187662
1983	0	0	0	5880	159241	18156	1035	3300	0	0	187612
1984	0	173000	0	5844	150182	19054	473	705	0	150000	499258
1985	0	0	0	1559	172294	28078	1710	450	0	0	204091
1986	0	0	0	555	102097	677	1475	0	0	7200	112004
1987	0	0	0	9026	129456	21043	4000	1500	0	0	165025
1988	0	0	0	1904	96272	3545	20	2140	0	0	103881
1989	0	0	0	1362	77090	205	0	130	0	0	78787
1990	0	0	0	355	55216	3897	60	400	0	0	59928
1991	0	0	0	0	33580	2310	0	190	0	0	36080
TOTALS	87499	173000	750	285650	8423983	3313578	175258	56703	2860	615400	13134681

CRUDE OIL
INITIAL ESTABLISHED RESERVES IN CANADA BY YEAR OF DISCOVERY
AT 1991-12-31

Thousand Cubic Metres

YEAR OF DISCOVERY	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
PRE 1947	37500	0	0	0	57584	0	0	1547	133	0	96764
1947	0	0	0	0	65447	1469	0	20	0	0	66936
1948	0	0	0	0	138922	1728	0	3	0	0	140653
1949	0	0	0	0	62761	2710	0	1690	0	0	67161
1950	0	0	0	0	84283	335	0	260	0	0	84878
1951	0	0	0	0	74573	16138	4677	28	0	0	95416
1952	0	0	0	302	144404	27704	150	236	0	0	172796
1953	0	0	0	22	274846	62813	19719	118	0	0	357518
1954	0	0	0	34542	70264	136257	1264	80	0	0	242407
1955	0	0	0	0	32749	43752	2733	119	0	0	79353
1956	0	0	0	849	31088	48741	37	0	0	0	80715
1957	0	0	0	10576	189416	13011	159	1	0	0	213163
1958	0	0	0	983	77557	3526	0	1629	0	0	83695
1959	0	0	0	5591	160007	16837	0	372	0	0	182807
1960	0	0	0	569	9045	7323	0	0	0	0	16937
1961	0	0	0	50	34057	3994	6	57	0	0	38164
1962	0	0	0	188	44520	3035	164	3103	0	0	51010
1963	0	0	0	4182	41443	16239	2	28	0	0	61894
1964	0	0	0	1228	71520	11580	568	273	0	0	85169
1965	0	0	0	14065	110494	12978	290	55	0	0	137882
1966	0	0	0	20	68036	3006	0	11	0	0	71073
1967	0	0	0	634	45681	5733	191	0	0	0	52239
1968	0	0	0	166	25833	7184	12	0	0	0	33195
1969	0	0	0	13	13933	5524	0	22	0	0	19492
1970	0	0	0	1701	8329	7538	0	97	0	0	17665
1971	0	0	0	390	11349	2614	0	0	0	0	14353
1972	0	0	0	2526	4776	653	0	57	0	0	8012
1973	0	0	0	377	21053	914	0	50	0	2900	25294
1974	0	0	300	85	8690	7631	8	1	0	0	16715
1975	0	0	0	97	9336	301	0	0	0	0	9734
1976	0	0	0	7764	6225	1262	0	0	0	0	15251
1977	0	0	0	124	30266	2935	0	23	0	0	33348
1978	0	0	0	620	47818	2978	67	52	0	0	51535
1979	0	0	0	122	30717	4813	0	39	0	83000	118691
1980	0	0	0	85	18996	2304	4179	3	0	0	25567
1981	0	0	0	39	12028	3211	232	7	0	0	15517
1982	0	0	0	67	14061	4546	593	0	0	0	19267
1983	0	0	0	226	20524	1491	153	660	0	0	23054
1984	0	54000	0	248	21995	1514	100	136	0	50000	127993
1985	0	0	0	251	23605	2559	208	90	0	0	26713
1986	0	0	0	44	13809	65	142	0	0	2700	16760
1987	0	0	0	2802	18155	1331	778	300	0	0	23366
1988	0	0	0	472	13246	318	1	425	0	0	14462
1989	0	0	0	272	10432	22	0	26	0	0	10752
1990	0	0	0	71	7319	577	3	84	0	0	8054
1991	0	0	0	0	6052	350	0	40	0	0	6442
TOTALS	37500	54000	300	92363	2287244	501544	36436	11742	133	138600	3159862

CRUDE OIL
INITIAL VOLUME IN-PLACE IN CANADA BY GEOLOGICAL AGE
AT 1991-12-31

Thousand Cubic Metres

GEOLOGICAL AGE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
CENOZOIC											
QUATERNARY	0	0	0	0	0	0	0	0	0	0	0
TERTIARY	0	173000	0	0	0	0	0	0	0	0	173000
MESOZOIC											
UPPER CRETACEOUS	0	0	0	0	1958003	0	0	0	0	0	1958003
LOWER CRETACEOUS	0	0	0	10689	2173591	1587134	0	0	0	465400	4236814
JURASSIC	0	0	0	0	171706	382626	32880	0	0	150000	737212
TRIASSIC	0	0	0	209458	228999	0	0	0	0	0	438457
PALEOZOIC											
PERMIAN	0	0	0	45434	14514	0	0	0	0	0	59948
PENNSYLVANIAN	0	0	0	0	0	0	0	0	0	0	0
MISSISSIPIAN	0	0	0	20069	600252	1318535	142378	0	2860	0	2084094
DEVONIAN	87499	0	750	0	3274536	21361	0	31858	0	0	3416004
SILURIAN	0	0	0	0	0	0	0	11072	0	0	11072
ORDOVICIAN	0	0	0	0	0	3922	0	9021	0	0	12943
CAMBRIAN	0	0	0	0	2382	0	0	4752	0	0	7134
ALL AGES	87499	173000	750	285650	8423983	3313578	175258	56703	2860	615400	13134681

CRUDE OIL
INITIAL ESTABLISHED RESERVES IN CANADA BY GEOLOGICAL AGE
AT 1991-12-31

Thousand Cubic Metres

GEOLOGICAL AGE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
CENOZOIC											
QUATERNARY	0	0	0	0	0	0	0	0	0	0	0
TERTIARY	0	54000	0	0	0	0	0	0	0	0	54000
MESOZOIC											
UPPER CRETACEOUS	0	0	0	0	350897	0	0	0	0	0	350897
LOWER CRETACEOUS	0	0	0	2950	309551	114180	0	0	0	88600	515281
JURASSIC	0	0	0	0	40204	100232	4757	0	0	50000	195193
TRIASSIC	0	0	0	75173	52141	0	0	0	0	0	127314
PALEOZOIC											
PERMIAN	0	0	0	11152	6660	0	0	0	0	0	17812
PENNSYLVANIAN	0	0	0	0	0	0	0	0	0	0	0
MISSISSIPIAN	0	0	0	3088	95352	284117	31679	0	133	0	414369
DEVONIAN	37500	0	300	0	1431956	2659	0	6908	0	0	1479323
SILURIAN	0	0	0	0	0	0	0	2188	0	0	2188
ORDOVICIAN	0	0	0	0	0	356	0	1835	0	0	2191
CAMBRIAN	0	0	0	0	483	0	0	811	0	0	1294
ALL AGES	37500	54000	300	92363	2287244	501544	36436	11742	133	138600	3159862

RAW NATURAL GAS
INITIAL VOLUME IN-PLACE IN CANADA BY YEAR OF DISCOVERY
AT 1991-12-31

Million Cubic Metres at 101.325 kPa and 15°C

YEAR OF DISCOVERY	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
PRE 1947	5250	0	0	0	719200	639	0	40276	902	0	766267
1947	0	0	0	0	40261	3	0	2100	0	0	42364
1948	0	0	0	0	55692	0	0	233	0	0	55925
1949	0	0	0	0	59900	0	0	1140	0	0	61040
1950	0	0	0	0	41449	0	0	1315	0	0	42764
1951	0	0	0	861	69006	7871	0	582	0	0	78320
1952	0	0	0	10416	228535	749	0	2385	0	0	242085
1953	0	0	0	25231	199124	85441	0	13	0	0	309809
1954	0	0	0	10800	250666	36175	0	535	0	0	298176
1955	162	0	0	25593	147887	7237	0	75	45	0	180999
1956	0	0	0	66801	94393	4866	0	215	0	0	166275
1957	0	0	0	50959	226502	6210	0	0	0	0	283671
1958	0	0	0	28440	136547	2674	0	2604	0	0	170265
1959	0	0	0	19350	259819	11	0	3763	0	0	282943
1960	869	0	0	30983	131274	1075	0	15	0	0	164216
1961	2476	0	0	63468	287112	0	0	650	0	0	353706
1962	0	0	0	5338	108406	608	0	2416	0	0	116768
1963	0	0	0	14109	73681	7140	0	310	0	0	95240
1964	375	0	0	8093	66519	152	0	4489	0	0	79628
1965	410	0	0	50632	118139	1786	0	2482	0	0	173449
1966	15213	0	0	8039	50742	34	0	52	0	0	74080
1967	0	0	0	10278	116318	396	0	1193	0	0	128185
1968	0	0	0	5887	67812	305	0	3141	0	0	77145
1969	0	0	162500	6071	113533	4054	0	690	0	0	286848
1970	0	0	0	7777	43877	13135	0	5267	0	0	70056
1971	0	113600	23000	12425	65710	1843	0	2738	0	0	219316
1972	0	57920	133700	26370	90934	695	0	5701	186	0	315506
1973	0	32560	28000	12825	92796	1400	0	1948	0	0	169529
1974	0	4940	0	6986	149788	1527	0	5156	0	0	168397
1975	0	35400	0	16493	71107	0	0	3206	0	0	126206
1976	0	20800	42100	12232	167975	0	0	2436	0	0	245543
1977	31193	0	0	24622	181996	89	0	2909	0	0	240809
1978	0	900	16900	44472	158542	572	0	2146	0	0	223532
1979	0	0	73000	28604	162440	94	0	6120	0	0	270258
1980	0	44500	14600	27086	142549	38053	0	6020	0	0	272808
1981	0	0	38400	12290	108725	0	0	1570	0	0	160985
1982	0	4350	0	8745	56357	0	0	74	0	0	69526
1983	0	0	0	1855	66231	5035	0	165	0	0	73286
1984	0	92560	0	1755	58689	1022	0	51	0	0	154077
1985	0	0	20900	5924	62492	6835	0	94	0	0	96245
1986	852	0	0	7572	104047	928	0	0	0	0	113399
1987	0	0	0	9346	54516	60	0	0	0	0	63922
1988	0	0	0	7162	73437	0	0	948	0	0	81547
1989	0	0	0	13570	55440	192	0	450	0	0	69652
1990	0	0	0	7518	56835	0	0	905	0	0	65258
1991	0	0	0	1318	24062	70	0	190	0	0	25640
TOTALS	56800	407530	553100	738296	5711062	238976	0	118768	1133	0	7825665

RAW NATURAL GAS
INITIAL ESTABLISHED RESERVES IN CANADA BY YEAR OF DISCOVERY
AT 1991-12-31

Million Cubic Metres at 101.325 kPa and 15°C

YEAR OF DISCOVERY	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
PRE 1947	3360	0	0	0	473448	570	0	18963	862	0	497203
1947	0	0	0	0	30519	2	0	1260	0	0	31781
1948	0	0	0	0	20257	0	0	148	0	0	20405
1949	0	0	0	0	37345	0	0	685	0	0	38030
1950	0	0	0	0	33687	0	0	795	0	0	34482
1951	0	0	0	287	48979	6650	0	350	0	0	56266
1952	0	0	0	9095	179710	487	0	1433	0	0	190725
1953	0	0	0	15081	112076	57407	0	8	0	0	184572
1954	0	0	0	5739	188877	10521	0	319	0	0	205456
1955	146	0	0	22624	110641	2641	0	45	42	0	136139
1956	0	0	0	46081	74929	2567	0	136	0	0	123713
1957	0	0	0	42285	148981	2398	0	0	0	0	193664
1958	0	0	0	22160	98550	2139	0	664	0	0	123513
1959	0	0	0	15065	203141	8	0	1050	0	0	219264
1960	800	0	0	18854	98272	443	0	9	0	0	118378
1961	2206	0	0	53759	230423	0	0	400	0	0	286788
1962	0	0	0	3585	81877	517	0	133	0	0	86112
1963	0	0	0	8416	49339	5490	0	130	0	0	63375
1964	338	0	0	6354	45666	122	0	395	0	0	52875
1965	350	0	0	40496	84039	1397	0	671	0	0	126953
1966	8333	0	0	6624	36044	28	0	31	0	0	51060
1967	0	0	0	7367	93268	170	0	310	0	0	101115
1968	0	0	0	4061	46285	229	0	817	0	0	51392
1969	0	0	137880	5031	91866	2417	0	420	0	0	237614
1970	0	0	0	5829	29966	8538	0	916	0	0	45249
1971	0	90900	16100	10003	49939	1344	0	911	0	0	169197
1972	0	46590	109070	13424	64062	537	0	3095	186	0	236964
1973	0	27390	19600	9650	63848	1004	0	307	0	0	121799
1974	0	4070	0	5486	107476	1070	0	916	0	0	119018
1975	0	27628	0	12454	53496	0	0	1382	0	0	94960
1976	0	16220	29500	9672	117579	0	0	379	0	0	173350
1977	7424	0	0	17923	131823	71	0	1654	0	0	158895
1978	0	675	11830	36305	117127	458	0	1043	0	0	167438
1979	0	0	51130	21231	109285	75	0	1029	0	0	182750
1980	0	33400	10220	19475	104331	30233	0	1014	0	0	198673
1981	0	0	27105	8750	79522	0	0	579	0	0	115956
1982	0	3260	0	6087	40783	0	0	48	0	0	50178
1983	0	0	0	1530	50543	3370	0	113	0	0	55556
1984	0	79070	0	1415	40427	767	0	13	0	0	121692
1985	0	0	15680	4700	45518	5343	0	30	0	0	71271
1986	600	0	0	6361	81792	774	0	0	0	0	89527
1987	0	0	0	7894	40368	57	0	0	0	0	48319
1988	0	0	0	5893	54358	0	0	486	0	0	60737
1989	0	0	0	11150	40352	165	0	225	0	0	51892
1990	0	0	0	6093	41096	0	0	450	0	0	47639
1991	0	0	0	1029	17406	45	0	95	0	0	18575
TOTALS	23557	329203	428115	555318	4099316	150054	0	43857	1090	0	5630510

MARKETABLE NATURAL GAS
INITIAL ESTABLISHED RESERVES IN CANADA BY YEAR OF DISCOVERY
AT 1991-12-31

Million Cubic Metres at 101.325 kPa and 15°C

YEAR OF DISCOVERY	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
PRE 1947	903	0	0	0	422834	541	0	17772	809	0	442859
1947	0	0	0	0	25934	2	0	1197	0	0	27133
1948	0	0	0	0	13272	0	0	145	0	0	13417
1949	0	0	0	0	32962	0	0	651	0	0	33613
1950	0	0	0	0	28724	0	0	752	0	0	29476
1951	0	0	0	266	39579	5317	0	332	0	0	46494
1952	0	0	0	7774	154966	463	0	1361	0	0	164564
1953	0	0	0	12571	79216	54272	0	8	0	0	146067
1954	0	0	0	4549	146079	5449	0	301	0	0	156378
1955	146	0	0	19679	95556	1029	0	43	41	0	116494
1956	0	0	0	41027	63165	1491	0	133	0	0	105816
1957	0	0	0	36218	117096	1806	0	0	0	0	155120
1958	0	0	0	18560	79196	2080	0	626	0	0	100462
1959	0	0	0	12884	162278	8	0	997	0	0	176167
1960	680	0	0	16162	70691	178	0	9	0	0	87720
1961	1879	0	0	42691	156482	0	0	364	0	0	201416
1962	0	0	0	2802	71931	491	0	126	0	0	75350
1963	0	0	0	7026	42041	4974	0	120	0	0	54161
1964	287	0	0	5199	37633	115	0	375	0	0	43609
1965	300	0	0	33380	70968	1327	0	638	0	0	106613
1966	7000	0	0	5727	28678	26	0	30	0	0	41461
1967	0	0	0	5197	73232	160	0	294	0	0	78883
1968	0	0	0	3162	39207	217	0	778	0	0	43364
1969	0	0	130780	3970	61504	2282	0	400	0	0	198936
1970	0	0	0	5259	26444	8111	0	871	0	0	40685
1971	0	86300	15300	8379	45083	1277	0	865	0	0	157204
1972	0	44240	103590	11288	57546	511	0	2942	186	0	220303
1973	0	26190	18620	7328	57453	954	0	292	0	0	110837
1974	0	3820	0	4027	97145	1017	0	869	0	0	106878
1975	0	25480	0	10388	47226	0	0	1314	0	0	84408
1976	0	15290	28000	7346	100198	0	0	359	0	0	151193
1977	5917	0	0	14849	117619	68	0	1572	0	0	140025
1978	0	640	11240	31703	102443	435	0	993	0	0	147454
1979	0	0	48570	16777	94084	71	0	977	0	0	160479
1980	0	31700	9710	17914	92519	28715	0	963	0	0	181521
1981	0	0	25660	7518	70790	0	0	552	0	0	104520
1982	0	3100	0	5730	36645	0	0	45	0	0	45520
1983	0	0	0	1231	45518	3269	0	103	0	0	50121
1984	0	61970	0	1248	35650	727	0	13	0	0	99608
1985	0	0	14900	3966	39066	4660	0	27	0	0	62619
1986	417	0	0	5622	44980	729	0	0	0	0	51748
1987	0	0	0	6729	35248	14	0	0	0	0	41991
1988	0	0	0	4815	48906	0	0	453	0	0	54174
1989	0	0	0	7988	35525	156	0	210	0	0	43879
1990	0	0	0	5195	37204	0	0	425	0	0	42824
1991	0	0	0	879	15620	40	0	90	0	0	16629
TOTALS	17529	298730	406370	465023	3396136	133982	0	41387	1036	0	4760193

RAW NATURAL GAS
INITIAL VOLUME IN-PLACE IN CANADA BY GEOLOGICAL AGE
AT 1991-12-31

Million Cubic Metres at 101.325 kPa and 15°C

GEOLOGICAL AGE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
CENOZOIC											
QUATERNARY	0	0	0	0	14	0	0	0	45	0	59
TERTIARY	0	332720	0	0	41	0	0	0	0	0	332761
MESOZOIC											
UPPER CRETACEOUS	0	74810	0	239	884755	114892	0	0	0	0	1074696
LOWER CRETACEOUS	0	0	54000	112433	2032030	62598	0	0	0	0	2261061
JURASSIC	0	0	464000	0	149620	2154	0	0	0	0	615774
TRIASSIC	0	0	35100	291172	118919	0	0	0	0	0	445191
PALEOZOIC											
PERMIAN	0	0	0	29586	13085	0	0	0	0	0	42671
PENNSYLVANIAN	0	0	0	0	0	0	0	0	0	0	0
MISSISSIPIAN	219	0	0	36454	1085577	59332	0	0	902	0	1182484
DEVONIAN	56581	0	0	268412	1427021	0	0	46	0	0	1752060
SILURIAN	0	0	0	0	0	0	0	116547	0	0	116547
ORDOVICIAN	0	0	0	0	0	0	0	1411	186	0	1597
CAMBRIAN	0	0	0	0	0	0	0	764	0	0	764
ALL AGES	56800	407530	553100	738296	5711062	238976	0	118768	1133	0	7825665

RAW NATURAL GAS
INITIAL ESTABLISHED RESERVES IN CANADA BY GEOLOGICAL AGE
AT 1991-12-31

Million Cubic Metres at 101.325 kPa and 15°C

GEOLOGICAL AGE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
CENOZOIC											
QUATERNARY	0	0	0	0	7	0	0	0	42	0	49
TERTIARY	0	270003	0	0	31	0	0	0	0	0	270034
MESOZOIC											
UPPER CRETACEOUS	0	59200	0	179	525353	81824	0	0	0	0	666556
LOWER CRETACEOUS	0	0	38310	91492	1491574	46734	0	0	0	0	1668110
JURASSIC	0	0	363715	0	115344	1868	0	0	0	0	480927
TRIASSIC	0	0	26090	214415	87879	0	0	0	0	0	328384
PALEOZOIC											
PERMIAN	0	0	0	25932	9772	0	0	0	0	0	35704
PENNSYLVANIAN	0	0	0	0	0	0	0	0	0	0	0
MISSISSIPIAN	175	0	0	27544	851546	19628	0	0	862	0	899755
DEVONIAN	23382	0	0	195756	1017810	0	0	27	0	0	1236975
SILURIAN	0	0	0	0	0	0	0	42440	0	0	42440
ORDOVICIAN	0	0	0	0	0	0	0	917	186	0	1103
CAMBRIAN	0	0	0	0	0	0	0	473	0	0	473
ALL AGES	23557	329203	428115	555318	4099316	150054	0	43857	1090	0	5630510

MARKETABLE NATURAL GAS
INITIAL ESTABLISHED RESERVES IN CANADA BY GEOLOGICAL AGE
AT 1991-12-31

Million Cubic Metres at 101.325 kPa and 15°C

GEOLOGICAL AGE	MAIN TERR	MAC DELTA BEAU SEA	ARCTIC ISLES	BC	ALTA	SASK	MAN	ONT	OTHER EAST CAN.	E. COAST OFFSHORE	TOTAL CANADA
CENOZOIC											
QUATERNARY	0	0	0	0	7	0	0	0	41	0	48
TERTIARY	0	242530	0	0	29	0	0	0	0	0	242559
MESOZOIC											
UPPER CRETACEOUS	0	56200	0	156	463480	77450	0	0	0	0	597286
LOWER CRETACEOUS	0	0	36410	80862	1370144	44200	0	0	0	0	1531616
JURASSIC	0	0	345180	0	101258	1734	0	0	0	0	448172
TRIASSIC	0	0	24780	176803	77009	0	0	0	0	0	278592
PALEOZOIC											
PERMIAN	0	0	0	22084	8548	0	0	0	0	0	30632
PENNSYLVANIAN	0	0	0	0	0	0	0	0	0	0	0
MISSISSIPIAN	153	0	0	25468	685381	10598	0	0	809	0	722409
DEVONIAN	17376	0	0	159650	690280	0	0	26	0	0	867332
SILURIAN	0	0	0	0	0	0	0	40148	0	0	40148
ORDOVICIAN	0	0	0	0	0	0	0	780	186	0	966
CAMBRIAN	0	0	0	0	0	0	0	433	0	0	433
ALL AGES	17529	298730	406370	465023	3396136	133982	0	41387	1036	0	4760193

CANADIAN CRUDE OIL PRODUCTION

Cubic Metres

	Northwest Territories*	British Columbia	Alberta	Saskatchewan	Manitoba	Western Canada	Ontario	New Brunswick	Eastern Canada	Canada
1971	149 240	3 997 242	56 779 900	14 062 694	890 622	75 879 698	152 252	1 525	153 777	76 033 475
1972	141 456	3 787 007	67 508 300	13 767 933	835 380	86 040 076	139 540	1 385	140 925	86 181 001
1973	152 988	3 367 264	83 012 600	13 625 605	807 882	100 966 339	128 565	1 576	130 141	101 096 480
1974	158 806	2 994 500	79 108 300	11 725 945	754 667	94 742 218	116 708	1 262	117 970	94 860 188
1975	159 874	2 268 795	67 511 900	9 379 084	701 459	80 021 112	111 978	1 062	113 040	80 134 152
1976	142 416	2 366 299	60 908 200	8 885 931	633 322	72 936 168	99 812	865	100 677	73 036 845
1977	137 520	2 199 233	60 514 100	9 763 272	630 466	73 244 591	98 372	794	99 166	73 343 757
1978	145 649	2 003 724	60 015 300	9 624 550	598 354	72 387 577	95 144	636	95 780	72 483 357
1979	149 915	2 139 963	68 515 800	9 371 831	583 377	80 760 886	91 984	571	92 555	80 853 441
1980	160 542	2 002 128	63 200 800	9 330 839	563 482	75 257 791	93 882	475	94 357	75 352 148
1981	173 367	2 032 308	56 978 500	7 392 727	542 695	67 119 597	89 983	321	90 304	67 209 901
1982	173 294	2 076 533	54 383 700	8 104 366	582 223	65 320 116	85 638	103	85 741	65 405 857
1983	169 430	2 078 771	55 317 100	9 543 275	736 934	67 845 510	83 600	100	83 700	67 929 210
1984	174 724	2 094 156	59 886 000	10 812 499	793 284	73 760 663	90 500	100	90 600	73 851 263
1985	1 099 000	1 958 194	56 994 700	11 616 186	820 729	72 488 809	112 300	100	112 400	72 601 209
1986	1 527 700	2 019 450	53 081 700	11 690 644	823 322	69 142 816	135 500	100	135 600	69 278 416
1987	1 567 000	2 083 471	55 170 300	12 037 145	781 806	71 639 722	133 000	495	133 495	71 773 217
1988	1 803 000	1 882 038	57 652 600	12 249 366	768 563	74 355 567	190 570	367	190 937	74 546 504
1989	1 876 000	1 888 438	54 604 600	11 626 032	722 820	70 717 890	243 676	—	243 676	70 961 566
1990	1 865 037	1 926 023	52 972 800	12 249 177	737 762	69 750 799	247 200	—	247 200	69 997 999
1991	1 926 500	2 012 833	52 089 500	12 390 139	712 792	69 131 764	235 249	—	235 249	69 367 013
	16 046 354	74 486 613	1 804 680 273	395 001 181	28 572 719	2 318 787 140	10 618 088	127 964	10 746 052	2 329 533 192

NOTE: Effective 1985, Alberta experimental crude included with the above.

*Includes Arctic Islands commencing in 1985 and Beaufort Sea in 1986.

JULY 1992

SECTION III
Table 1A

CANADIAN SYNTHETIC & OTHER CRUDE OIL PRODUCTION

Thousand Cubic Metres

	Alberta		
	Synthetic Crude	Experimental & Crude Bitumen*	Canada
1967	72	42	114
1968	823	64	887
1969	1 603	69	1 672
1970	1 904	38	1 942
1971	2 451	15	2 466
1972	2 963	71	3 034
1973	2 906	71	2 977
1974	2 654	73	2 727
1975	2 506	199	2 705
1976	2 810	440	3 250
1977	2 641	486	3 127
1978	3 262	453	3 715
1979	5 288	581	5 869
1980	7 451	556	8 007
1981	6 278	753	7 031
1982	6 000	1 281	7 281
1983	8 639	1 455	10 094
1984	7 782	1 943	9 725
1985	9 569	3 030	12 599
1986	10 728	5 410	16 138
1987	10 472	6 731	17 203
1988	11 643	7 546	19 189
1989	11 901	7 474	19 375
1990	12 091	7 856	19 947
1991	13 121	7 113	20 234
	147 558	53 750	201 308

* Effective 1985, experimental light and medium or heavy crude production is included with the conventional on Table 1.

CANADIAN CONDENSATE PRODUCTION

Cubic Metres

	British Columbia	Alberta	Manitoba	Canada
Cum. to 1950	—	1 396 562	—	1 396 562
1951	—	12 595	—	12 595
1952	—	12 558	—	12 558
1953	—	18 166	—	18 166
1954	—	6 996	—	6 996
1955	—	28 908	—	28 908
1956	—	36 174	—	36 174
1957	—	115 037	—	115 037
1958	—	126 743	—	126 743
1959	—	184 631	—	184 631
1960	—	353 394	—	353 394
1961	25	476 284	—	476 309
1962	1 529	1 055 724	—	1 057 253
1963	2 172	544 488	—	546 660
1964	4 190	152 503	—	156 693
1965	5 050	92 734	—	97 784
1966	6 288	118 817	—	125 105
1967	6 447	120 613	—	127 060
1968	8 607	126 969	—	135 576
1969	12 418	107 400	—	119 818
1970	17 044	111 600	—	128 644
1971	17 322	121 500	—	138 822
1972	16 611	145 200	—	161 811
1973	20 104	158 700	—	178 804
1974	16 553	119 400	—	135 953
1975	16 086	113 800	—	129 886
1976	18 300	115 200	—	133 500
1977	24 453	121 900	—	146 353
1978	25 373	122 300	—	147 673
1979	32 549	134 200	—	166 749
1980	36 855	111 300	—	148 155
1981	28 525	95 100	—	123 625
1982	20 361	104 400	—	124 761
1983	17 636	98 000	—	115 636
1984	14 102	133 900	—	148 002
1985	12 096	151 900	2 920	166 916
1986	17 480	103 000	730	121 210
1987	25 879	86 800	2 200	114 879
1988	28 538	117 200	607	146 345
1989	27 868	161 700	1 920	191 488
1990	24 794	128 100	2 259	155 153
1991	23 858	158 700	1 500	184 058
	529 113	7 801 196	12 136	8 342 445

CANADIAN PENTANES PLUS PRODUCTION

Cubic Metres

	British Columbia	Alberta	Saskatchewan	Canada
Cum. to 1947	—	931 648	—	931 648
1947	—	67 890	—	67 890
1948	—	74 474	—	74 474
1949	—	75 871	—	75 871
1950	—	70 935	—	70 935
1951	—	81 843	—	81 843
1952	—	92 148	—	92 148
1953	—	95 786	—	95 786
1954	—	108 437	—	108 437
1955	—	138 000	—	138 000
1956	—	146 030	—	146 030
1957	4 444	157 728	—	162 172
1958	39 895	170 813	2 447	213 155
1959	81 513	265 056	24 152	370 721
1960	119 317	311 277	36 104	466 698
1961	129 284	699 895	35 907	865 086
1962	133 139	1 497 996	42 362	1 673 497
1963	133 761	2 775 033	43 422	2 952 216
1964	146 548	3 702 430	45 389	3 894 367
1965	150 556	4 145 298	40 162	4 336 016
1966	154 868	4 347 806	39 895	4 542 569
1967	161 460	4 539 898	47 034	4 748 392
1968	152 594	4 934 305	51 563	5 138 462
1969	150 029	5 786 244	59 888	5 996 161
1970	159 409	6 657 502	64 750	6 881 661
1971	177 048	7 071 511	62 135	7 310 694
1972	161 772	9 270 495	63 589	9 495 856
1973	179 998	9 427 390	67 570	9 674 958
1974	178 444	9 012 300	56 443	9 247 187
1975	185 182	8 443 500	52 072	8 680 754
1976	167 494	7 420 900	46 777	7 635 171
1977	180 179	7 343 700	23 254	7 547 133
1978	155 427	6 561 100	44 011*	6 760 538
1979	184 397	6 472 200	42 974*	6 699 571
1980	133 601	5 890 700	37 527*	6 061 828
1981	124 946	5 652 200	28 455*	5 805 601
1982	135 185	5 529 600	25 842*	5 690 627
1983	113 984	5 161 100	17 408*	5 292 492
1984	131 441	5 333 000	36 100*	5 500 541
1985	125 059	5 644 600	26 200*	5 795 859
1986	141 343	5 717 600	28 300*	5 887 243
1987	187 805	6 061 300	27 100*	6 276 205
1988	196 231	6 285 300	28 580*	6 510 111
1989	235 375	6 440 800	27 450*	6 703 625
1990	234 035	6 306 400	26 339*	6 566 744
1991	250 672	6 620 100	25 750*	6 896 522
	5 296 435	183 540 139	1 326 951	190 163 525

*Includes condensate

CANADIAN PROPANE PRODUCTION*

Cubic Metres

	British Columbia	Alberta	Saskatchewan	Manitoba	Canada
1948	—	1 347	—	—	1 347
1949	—	75 871	—	—	8 596
1950	—	22 392	—	—	22 392
1951	—	39 453	—	—	39 453
1952	—	53 600	—	—	53 600
1953	—	68 743	—	—	68 743
1954	—	83 987	—	—	83 987
1955	—	126 426	—	—	126 426
1956	—	146 939	—	—	146 939
1957	—	176 405	—	—	176 405
1958	10 967	159 735	3 815	—	174 517
1959	15 385	235 999	44 604	—	295 988
1960	19 856	299 927	63 129	—	382 912
1961	25 886	374 499	69 044	—	469 429
1962	34 444	466 978	82 066	—	583 488
1963	32 565	540 903	94 759	—	668 227
1964	38 858	887 079	102 540	—	1 028 477
1965	56 948	1 443 047	107 252	—	1 607 247
1966	53 066	1 800 871	119 218	—	1 973 155
1967	65 565	2 033 180	140 522	—	2 239 267
1968	63 619	2 303 463	149 656	—	2 516 738
1969	51 984	2 637 500	135 662	—	2 825 146
1970	66 718	3 199 800	126 361	—	3 392 879
1971	74 425	3 671 900	126 566	—	3 872 891
1972	76 198	4 624 500	121 292	—	4 821 990
1973	90 026	5 166 500	116 102	—	5 381 628
1974	89 225	5 083 300	99 238	—	5 271 763
1975	81 842	5 358 700	88 869	—	5 529 411
1976	88 052	5 240 400	81 292	—	5 409 744
1977	91 149	5 342 000	78 893	—	5 512 042
1978	85 702	5 050 700	80 132	—	5 216 534
1979	84 864	5 543 400	75 779	—	5 704 043
1980	75 507	5 294 900	66 926	—	5 437 333
1981	64 118	5 192 500	34 129	—	5 290 747
1982	68 783	5 235 400	27 080	—	5 331 263
1983	62 494	4 945 000	67 100	—	5 074 594
1984	59 687	5 475 700	79 500	—	5 614 887
1985	64 802	5 445 600	84 600	4 380	5 599 382
1986	209 062	5 074 300	56 500	3 650	5 343 512
1987	230 602	5 602 700	64 900	3 400	5 901 602
1988	246 789	5 896 400	68 000	3 137	6 214 326
1989	277 995	6 268 500	65 335	4 400	6 616 230
1990	267 879	6 520 000	62 687	4 605	6 855 171
1991	274 645	6 569 870	61 290	3 200	6 909 005
	3 208 707	129 713 139	2 844 838	26 772	135 793 456

*Gas processing plant production

CANADIAN BUTANES PRODUCTION*

Cubic Metres

	British Columbia	Alberta	Saskatchewan	Manitoba	Canada
1950	—	5 385	—	—	5 385
1951	—	13 424	—	—	13 424
1952	—	22 270	—	—	22 270
1953	—	31 508	—	—	31 508
1954	—	38 938	—	—	38 938
1955	—	78 143	—	—	78 143
1956	—	93 958	—	—	93 958
1957	—	118 744	—	—	118 744
1958	12 960	105 358	2 972	—	121 290
1959	32 878	177 650	27 304	—	237 832
1960	46 590	202 083	36 345	—	285 018
1961	51 090	260 144	38 322	—	349 556
1962	61 548	322 591	46 192	—	430 331
1963	64 967	396 694	53 393	—	515 054
1964	73 332	741 262	58 289	—	872 883
1965	75 910	964 212	53 741	—	1 093 863
1966	79 560	1 158 462	54 323	—	1 292 345
1967	93 399	1 319 233	62 557	—	1 475 189
1968	83 780	1 506 777	64 554	—	1 655 111
1969	66 310	1 654 800	55 227	—	1 776 337
1970	49 019	2 082 700	55 805	—	2 187 524
1971	50 532	2 400 500	59 317	—	2 510 349
1972	54 139	3 054 800	50 839	—	3 159 778
1973	108 933	3 361 200	49 834	—	3 519 967
1974	105 307	3 371 700	42 072	—	3 519 079
1975	106 308	3 501 900	37 986	—	3 646 194
1976	109 658	3 436 000	36 977	—	3 582 635
1977	111 233	3 500 400	38 064	—	3 649 697
1978	106 461	3 212 000	39 135	—	3 357 596
1979	112 683	3 470 800	36 503	—	3 619 986
1980	89 556	3 250 200	31 127	—	3 370 883
1981	84 635	3 126 100	18 138	—	3 228 873
1982	89 443	3 117 400	16 516	—	3 223 359
1983	80 291	3 032 400	43 680	—	3 156 371
1984	81 972	3 103 100	47 900	—	3 232 972
1985	73 932	3 095 400	49 000	1 095	3 219 427
1986	114 957	2 847 000	41 400	1 095	3 004 452
1987	141 643	3 128 500	45 100	1 100	3 316 343
1988	149 123	3 353 100	47 630	1 316	3 551 169
1989	162 683	3 246 300	45 750	1 680	3 456 413
1990	152 224	3 253 600	43 898	1 824	3 451 546
1991	162 349	3 537 655	42 920	1 200	3 744 124
	3 039 405	78 694 391	1 472 810	9 310	83 215 916

*Gas processing plant production.

CANADIAN LIQUID HYDROCARBON PRODUCTION

Cubic Metres Per Day

	1985	1986	1987	1988	1989	1990	1991
CRUDE OIL:							
Territories*	3 012	4 185	4 293	4 926	5 140	5 110	5 278
British Columbia	5 365	5 533	5 708	5 143	5 174	5 277	5 515
Alberta	156 150	145 429	151 151	157 521	149 602	145 131	142 711
Saskatchewan	31 825	32 029	32 978	33 469	31 852	33 559	33 946
Manitoba	2 248	2 256	2 142	2 100	1 980	2 021	1 953
Ontario	308	371	364	521	668	677	645
New Brunswick	—	—	1	1	—	—	—
	198 908	189 803	196 637	203 681	194 416	191 775	190 048
SYNTHETIC: Alberta	26 216	29 391	28 690	31 812	32 605	33 126	35 948
BITUMEN: Alberta	8 301	14 822	18 441	20 618	20 477	21 523	19 488
CONDENSATE:							
British Columbia	33	48	71	78	76	68	65
Alberta	416	282	238	321	443	351	435
Manitoba	8	2	6	2	5	6	4
	457	332	315	401	524	425	504
PENTANES PLUS:							
British Columbia	343	387	515	537	645	641	687
Alberta	15 464	15 665	16 606	17 173	17 646	17 278	18 137
Saskatchewan	72	78	74	77	75	72	71
	15 879	16 130	17 195	17 787	18 366	17 991	18 895
PROPANE:							
British Columbia	177	573	632	675	762	734	752
Alberta	14 919	13 902	15 350	16 111	17 174	17 863	18 000
Saskatchewan	193	155	178	186	179	172	168
Manitoba	12	10	9	9	12	13	9
	15 301	14 640	16 169	16 981	18 127	18 782	18 929
BUTANES:							
British Columbia	203	315	388	408	446	417	445
Alberta	8 480	7 800	8 571	9 162	8 894	8 914	9 692
Saskatchewan	118	113	124	128	125	120	118
Manitoba	3	3	3	4	5	5	3
	8 804	8 231	9 086	9 702	9 470	9 456	10 258
ETHANE:							
Alberta	14 981	14 101	17 680	17 795	17 879	19 468	20 651
Saskatchewan	117	121	120	120	118	113	111
	15 098	14 222	17 800	17 915	17 997	19 581	20 762
TOTAL LIQUID HYDROCARBONS:							
Territories	3 012	4 185	4 293	4 926	5 140	5 110	5 278
British Columbia	6 121	6 856	7 314	6 841	7 103	7 137	7 464
Alberta	244 927	241 392	256 727	270 513	264 720	263 654	265 062
Saskatchewan	32 325	32 496	33 474	33 980	32 349	34 036	34 414
Manitoba	2 271	2 271	2 160	2 115	2 002	2 045	1 969
Ontario	308	371	364	521	668	677	645
New Brunswick	..	..	1	1	—	—	—
	288 964	287 571	304 333	318 897	311 982	312 659	314 832

Note: Experimental L & M and H included with bitumen from 1967 - 1984, from 1985 onwards with crude oil.

*Includes Arctic Islands production commencing in 1985 and Beaufort Sea in 1986.

JULY 1992

SECTION III
Table 7C

CANADIAN CRUDE OIL PRODUCTION BY MAJOR FIELDS AND IN ORDER OF CUMULATIVE OUTPUT

	1991		Cumulative Production
	Cubic Metres	m³/d	Cubic Metres
NORTHWEST TERRITORIES			
Norman Wells	1 899 000	5 203	16 018 854
BRITISH COLUMBIA			
Boundary Lake	514 891	1 411	28 891 981
Peejay	97 446	267	9 863 773
Milligan Creek	41 112	113	6 917 842
Inga	79 883	219	5 856 678
Eagle West	260 499	714	5 185 032
ALBERTA			
Pembina	4 959 995	13 589	213 253 195
Redwater	607 327	1 664	127 454 727
Swan Hills	2 147 316	5 883	114 765 045
Rainbow	2 091 511	5 730	88 396 231
Bonnie Glen	333 587	914	81 405 987
Judy Creek	1 017 259	2 787	66 051 859
Leduc-Woodbend	96 221	264	60 331 321
Swan Hills South	577 846	1 583	56 796 477
Wizard Lake	333 312	913	52 523 445
Fenn Big Valley	202 921	556	50 909 921
Mitsue	1 604 954	4 397	50 153 154
Nipisi	1 347 791	3 693	48 279 091
Golden Spike	117 141	321	29 236 241
Virginia Hills	1 035 282	2 836	26 457 882
Sturgeon Lake South	698 094	1 913	24 901 094
Carson Creek North	390 400	1 070	23 570 400
Turner Valley	145 726	399	22 681 826
Westerose	324 689	890	22 035 789
Acheson	181 610	498	21 501 910
Provost	3 513 781	9 627	21 429 681
Willesden Green	387 822	1 063	19 914 522
Grand Forks	1 228 075	3 529	18 280 375
SASKATCHEWAN			
Weyburn	972 771	2 665	48 627 771
Steelman	408 562	1 119	41 479 127
Midale	322 271	883	20 249 730
Dollard	88 604	243	13 879 970
Instow	141 487	388	8 304 375
MANITOBA			
Virden	281 325	771	20 057 468
Daly	133 355	365	4 729 478
Waskada	186 894	512	2 242 064
Pierson	75 014	206	637 614
ONTARIO			
All Fields	235 249	645	10 618 088
NEW BRUNSWICK			
Stoney Creek	—	—	127 964

CANADIAN NATURAL GAS PRODUCTION*

Thousand Cubic Metres at 101.325 kPa and 15°C

	Northwest Territories	British Columbia	Alberta	Saskatchewan	Western Canada	Ontario	Quebec	New Brunswick	Eastern Canada	Canada
1971	60 340	9 960 394	59 592 200	2 460 590	72 073 524	458 000	4 775	2 950	465 725	72 539 249
1972	451 427	12 412 936	67 967 400	2 204 520	83 036 283	350 563	5 243	2 725	358 531	83 394 814
1973	1 093 750	13 459 870	73 590 700	2 160 570	90 304 890	269 912	5 538	2 273	277 723	90 582 613
1974	966 334	11 624 793	73 354 200	2 018 796	87 964 123	213 507	5 163	2 469	221 139	88 185 262
1975	934 466	11 276 880	74 468 600	1 960 569	88 640 515	309 780	1 417	2 554	313 751	88 954 266
1976	1 025 769	10 829 493	75 237 500	1 902 526	88 995 288	140 439	249	2 816	143 504	89 138 792
1977	855 604	11 061 437	78 545 400	1 669 055	92 131 496	241 524	—	2 413	243 937	92 375 433
1978	618 833	9 989 327	77 493 700	1 553 650	89 655 510	352 999	—	2 408	355 407	90 010 917
1979	626 126	11 384 221	82 314 100	1 559 124	95 883 571	387 931	—	2 407	390 338	96 273 909
1980	494 183	8 966 949	77 358 300	1 590 646	88 410 078	445 232	354	2 406	447 992	88 858 070
1981	397 515	8 418 623	76 375 600	1 498 408	86 690 146	419 271	4 718	2 027	426 016	87 116 162
1982	261 509	7 878 862	78 522 400	1 620 413	88 283 184	436 451	3 678	1 663	441 792	88 724 976
1983	226 658	7 852 641	75 005 700	1 669 302	84 754 301	460 900	5 454	1 600	467 954	85 222 255
1984	234 616	8 275 865	81 112 100	2 126 406	91 748 987	608 000	—	1 200	609 200	92 358 187
1985	448 900	8 844 743	87 130 000	2 403 802	98 827 445	521 100	—	1 200	522 300	99 349 745
1986	393 000	8 489 812	82 272 000	2 747 803	93 902 615	503 800	—	1 200	505 000	94 407 615
1987	377 300	9 826 219	88 363 600	3 098 074	101 665 193	507 500	—	3 000	510 500	102 175 693
1988	293 000	10 312 123	100 805 700	4 687 692	116 098 515	503 422	—	1 700	505 122	116 603 637
1989	225 300	12 816 753	102 283 300	6 155 893	121 481 246	492 500	2 400	—	494 900	121 976 146
1990	200 000	11 799 958	104 220 200	6 938 944	123 159 102	449 100	2 400	—	451 500	123 610 602
1991	447 000	15 186 257	109 136 300	7 400 788	132 170 345	440 628	2 400	—	443 028	132 613 373
	10 938 133	284 813 226	2 165 379 185	84 188 510	2 545 319 054	29 096 186	57 915	789 325	29 943 426	2 575 262 480

*Raw natural gas production less raw and processed gas injection.

JULY 1992

SECTION III
Table 9A

MARKETED GAS PRODUCTION

Million Cubic Metres at 101.325 kPa and 15°C

	Alberta	British Columbia	Saskatchewan	Territories	Eastern Canada	Canada	Average Daily
1947	924	—	7	—	233	1 164	3.19
1948	1 062	—	12	—	254	1 328	3.63
1949	1 150	—	13	—	237	1 400	3.84
1950	1 425	—	23	—	237	1 685	4.62
1951	1 607	—	24	—	245	1 876	5.14
1952	1 785	—	32	—	240	2 057	5.62
1953	2 043	—	44	—	278	2 365	6.48
1954	2 453	2	87	—	287	2 829	7.75
1955	3 002	5	171	—	311	3 489	9.56
1956	3 208	5	242	—	366	3 821	10.44
1957	3 781	207	337	—	411	4 736	12.98
1958	5 242	1 607	606	—	458	7 913	21.68
1959	7 074	1 787	893	—	480	10 234	28.04
1960	9 058	2 219	894	—	519	12 690	34.67
1961	11 868	2 704	918	—	415	15 905	43.58
1962	17 504	3 062	805	—	444	21 815	59.77
1963	19 532	2 973	868	—	452	23 825	65.27
1964	21 903	3 352	935	—	392	26 582	72.63
1965	24 039	3 911	981	—	360	29 291	80.25
1966	25 409	4 544	1 121	—	443	31 517	86.35
1967	27 400	6 184	1 123	—	406	35 113	96.20
1968	31 038	7 194	1 305	—	346	39 883	108.97
1969	36 735	8 267	1 605	—	324	46 931	128.58
1970	42 874	8 922	1 416	—	479	53 691	147.10
1971	47 529	9 434	1 616	25	463	59 067	161.83
1972	52 189	12 085	1 583	320	358	66 535	181.79
1973	55 521	13 082	1 566	849	275	71 293	195.32
1974	56 817	11 280	1 482	755	217	70 551	193.29
1975	58 142	10 837	1 503	750	309	71 541	196.00
1976	59 456	10 376	1 456	972	140	72 400	197.81
1977	62 666	10 619	1 187	630	242	75 344	206.42
1978	61 660	9 541	1 115	521	350	73 187	200.51
1979	66 220	9 700	1 178	526	388	78 012	213.73
1980	62 070	7 801	1 197	376	435	71 879	196.39
1981	61 950	7 100	1 191	292	415	70 948	194.38
1982	64 113	6 718	1 272	176	435	72 714	199.22
1983	60 590	6 625	1 314	163	467	69 159	189.48
1984	65 819	7 008	1 744	178	609	75 358	205.90
1985	72 849	7 558	1 946	207	522	83 082	227.62
1986	64 945	7 175	2 268	171	505	75 164	206.06
1987	69 940	8 506	2 712	166	511	81 835	224.20
1988	80 963	9 041	3 992	119	505	94 620	258.52
1989	83 479	11 428	5 587	109	495	101 098	276.98
1990	84 578	10 540	6 275	74	451	101 918	279.22
1991	89 286	13 807	6 605*	309	441	110 448	302.60
	1 682 898	257 206	63 351	7 688	17 150	2 028 293	

*Estimate

JULY 1992

SULPHUR PRODUCTION

Tonnes

	British Columbia	Alberta	Saskatchewan	Canada
1952	—	8 102	—	8 102
1953	—	16 599	—	16 599
1954	—	20 249	—	20 249
1955	—	26 393	—	26 393
1956	—	30 358	—	30 358
1957	3 532	91 358	—	94 890
1958	57 430	110 973	102	168 505
1959	48 710	216 494	682	265 886
1960	54 842	353 730	1 419	409 991
1961	50 489	441 367	1 720	493 576
1962	62 765	987 954	1 893	1 052 612
1963	54 768	1 247 367	435	1 302 570
1964	59 725	1 436 932	—	1 496 657
1965	51 979	1 563 115	—	1 615 094
1966	51 341	1 703 118	2 747	1 757 206
1967	49 405	2 150 122	3 919	2 203 446
1968	50 378	3 037 562	3 780	3 091 720
1969	57 947	3 713 000	3 181	3 774 128
1970	58 512	4 249 000	2 430	4 309 942
1971	67 535	4 558 000	3 044	4 628 579
1972	67 461	6 652 000	3 126	6 722 587
1973	73 975	7 087 000	3 237	7 164 212
1974	59 349	6 842 000*	2 766	6 904 115
1975	60 831	6 461 000*	2 326	6 524 157
1976	71 164	6 328 000*	1 977	6 401 141
1977	148 478	6 396 000*	1 383	6 545 861
1978	100 729	6 315 000*	1 769	6 417 498
1979	131 147	6 148 000*	114	6 279 261
1980	167 970	6 014 000*	—	6 181 970
1981	209 276	5 651 000*	—	5 860 276
1982	197 136	5 289 000*	—	5 486 136
1983	258 976	5 467 000*	—	5 725 976
1984	271 189	5 351 000*	—	5 622 189
1985	251 986	5 436 000*	—	5 687 986
1986	265 877	5 329 000*	—	5 594 877
1987	288 474	5 406 000*	—	5 694 474
1988	292 058	5 592 000*	—	5 884 058
1989	412 990	5 234 000*	—	5 646 990
1990	421 478	5 279 000*	—	5 700 478
1991	452 356	5 591 163*	—	6 043 519
	4 982 258	143 829 956	420 050	149 232 264

Refinery

1974	14 000
1975	14 000
1976	14 000
1977	17 000
1978	16 000
1979	12 000
1980	13 000
1981	11 000
1982	10 000
1983	12 000
1984	10 000
1985	10 000
1986	9 000
1987	12 000
1988	14 000
1989	16 000
1990	15 000
1991	17 000

Note: No production from gas plants prior to 1952.

*Excludes refinery production but includes oil sands plants.

JUNE 1992

SULPHUR SALES

Tonnes

	British Columbia	Alberta	Saskatchewan	Canada
1952	—	3 832	—	3 832
1953	—	14 580	—	14 580
1954	—	16 932	—	16 932
1955	—	23 565	—	23 565
1956	—	31 555	—	31 555
1957	—	84 665	—	84 665
1958	—	83 037	—	83 037
1959	41 020	87 670	340	129 030
1960	32 797	211 832	656	245 285
1961	48 156	307 606	2 710	358 472
1962	52 423	569 883	1 120	623 426
1963	68 763	1 060 908	47	1 129 718
1964	62 766	1 544 879	153	1 607 798
1965	80 544	1 765 777	958	1 847 279
1966	70 801	1 754 422	1 872	1 827 095
1967	50 657	2 169 259	3 850	2 223 766
1968	48 728	2 244 729	3 061	2 296 518
1969	49 031	2 610 000	2 751	2 661 782
1970	52 254	3 121 000	—	3 173 254
1971	53 680	2 715 000	1 025	2 769 705
1972	51 366	3 155 000	1 717	3 208 083
1973	55 016	4 064 000	2 860	4 121 876
1974	53 770	4 977 000	3 470	5 034 240
1975	38 530	3 835 000	3 638	3 877 168
1976	29 200	3 964 000	3 003	3 996 203
1977	41 749	5 137 000	2 308	5 181 057
1978	99 603	5 650 000	2 368	5 751 971
1979	146 189	6 147 000	2 440	6 295 629
1980	141 733	7 489 000	1 546	7 632 279
1981	244 068	7 709 000	—	7 953 068
1982	277 256	6 570 000	—	6 847 256
1983	258 427	6 228 000	—	6 486 427
1984	270 543	7 956 000	—	8 226 543
1985	263 733	7 831 000	—	8 094 733
1986	266 596	6 622 000	—	6 886 596
1987	298 877	6 936 000	—	7 234 877
1988	300 828	7 801 000	—	8 101 828
1989	433 261	5 786 000	—	6 219 261
1990	420 687	6 279 000	—	6 699 687
1991	453 190	6 265 372	—	6 718 562
	4 856 242	140 822 503	41 893	145 720 638

SULPHUR INVENTORY*

Tonnes

	British Columbia	Alberta	Saskatchewan	Canada
1952	—	2 877	—	2 877
1953	—	5 324	—	5 324
1954	—	7 388	—	7 388
1955	—	10 346	—	10 346
1956	—	8 742	—	8 742
1957	3 532	15 811	—	19 343
1958	60 325	40 264	102	100 691
1959	67 769	167 501	443	235 733
1960	88 724	305 073	1 145	394 942
1961	91 764	437 022	207	528 993
1962	102 107	852 608	879	955 594
1963	87 531	1 031 031	1 261	1 119 823
1964	84 490	914 270	1 107	999 867
1965	55 916	697 916	—	753 832
1966	36 361	621 594	865	658 820
1967	35 137	624 205	935	660 277
1968	36 696	1 405 109	1 653	1 443 458
1969	45 829	2 460 000	2 083	2 507 912
1970	52 087	3 591 000	4 513	3 647 600
1971	80 536	5 392 000	6 556	5 479 092
1972	96 631	8 788 000	8 143	8 892 774
1973	115 590	11 808 000	8 572	11 932 162
1974	121 170	13 676 000	7 874	13 805 044
1975	143 478	16 280 000	6 562	16 430 040
1976	185 442	18 639 000	5 539	18 829 981
1977	292 170	19 944 000	4 607	20 240 777
1978	293 296	20 599 000	3 953	20 896 249
1979	278 254	20 577 000	1 546	20 856 800
1980	304 491	18 867 000	—	19 171 491
1981	269 699	16 967 000	—	17 236 699
1982	189 579	15 576 000	—	15 765 579
1983	190 128	14 739 000	—	14 929 128
1984	190 774	12 063 000	—	12 253 774
1985	179 027	9 729 000	—	9 908 027
1986	176 308	8 489 000	—	8 667 308
1987	167 905	7 080 000	—	7 247 905
1988	159 135	4 999 000	—	5 158 135
1989	138 864	4 400 000	—	4 538 864
1990	138 073	3 287 000	—	3 425 073
1991	137 239	2 831 192	—	2 968 431

*Includes Westcoast stock piles.

CANADIAN ETHANE PRODUCTION*

Cubic Metres

	Alberta	Saskatchewan	Canada
1974	161 200	—	161 200
1975	192 700	—	192 700
1976	184 100	—	184 100
1977	370 400	—	370 400
1978	1 400 600	—	1 400 600
1979	3 587 200	—	3 587 200
1980	4 455 700	—	4 455 700
1981	4 670 700	20 345	4 691 045
1982	4 248 100	23 211	4 271 311
1983	4 658 700	45 033	4 703 733
1984	5 632 800	53 876	5 686 676
1985	5 468 200	42 700	5 510 900
1986	5 147 000	44 100	5 191 100
1987	6 453 100	43 800	6 496 900
1988	6 512 900	44 000	6 556 900
1989	6 525 700	43 190	6 568 890
1990	7 105 900	41 400	7 147 300
1991	7 537 530	40 520	7 578 050
	74 312 530	442 175	74 754 705

*Gas processing plant production.

JULY 1992

CANADIAN CRUDE OIL & EQUIVALENT PRODUCTIVE CAPACITY

Thousand Cubic Metres per Day

	CONVENTIONAL LIGHT & HEAVY CRUDE OIL	SYNTHETIC CRUDE OIL	BITUMEN	PENTANES PLUS	TOTAL
1947	4	—	—	—	4
1948	6	—	—	—	6
1949	10	—	—	—	10
1950	15	—	—	—	15
1951	25	—	—	—	25
1952	30	—	—	—	30
1953	50	—	—	—	50
1954	60	—	—	—	60
1955	80	—	—	—	80
1956	122	—	—	—	122
1957	139	—	—	—	139
1958	149	—	—	1	150
1959	156	—	—	1	157
1960	165	—	—	1	166
1961	173	—	—	2	175
1962	184	—	—	5	189
1963	196	—	—	8	204
1964	216	—	—	11	227
1965	260	—	—	12	272
1966	280	—	—	13	293
1967	289	—	—	13	302
1968	298	2	—	14	314
1969	308	4	—	17	330
1970	316	5	—	19	340
1971	318	7	—	20	345
1972	320	8	—	26	354
1973	323	8	—	27	358
1974	314	7	—	25	347
1975	293	7	1	24	324
1976	286	8	1	21	316
1977	271	7	1	21	301
1978	251	9	1	19	280
1979	226	14	2	19	261
1980	218	20	2	17	257
1981	211	17	2	16	246
1982	200	16	4	16	236
1983	199	24	4	15	242
1984	208	21	5	15	250
1985	213	26	8	16	264
1986	209	29	15	16	269
1987	204	29	18	17	268
1988	206	31	21	19	277
1989	195	36	20	19	270
1990	195	32	22	19	268
1991	185	33	22	18	258

NOTE: Represents annual average capacity.
Synthetic, bitumen and pentanes reflect actual production (Plate capacities may actually be higher).
Totals may not add due to rounding.

JULY 1992

TABLE 8	Net Cash Expenditures of the Petroleum Industry - Ontario
TABLE 8A	Net Cash Expenditures of the Petroleum Industry - Ontario
TABLE 9	Net Cash Expenditures of the Petroleum Industry - Quebec
TABLE 9A	Net Cash Expenditures of the Petroleum Industry - Quebec
TABLE 10	Net Cash Expenditures of the Petroleum Industry - Atlantic Provinces
TABLE 10A	Net Cash Expenditures of the Petroleum Industry - Atlantic Provinces
TABLE 11	Net Cash Expenditures of the Petroleum Industry - Eastcoast - Offshore
TABLE 11A	Net Cash Expenditures of the Petroleum Industry - Eastcoast - Offshore
TABLE 11B	Net Cash Expenditures of the Petroleum Industry - Eastcoast - Offshore
TABLE 12	Net Cash Expenditures of the Petroleum Industry - Hudson Bay - Offshore
TABLE 12A	Net Cash Expenditures of the Petroleum Industry - Hudson Bay - Offshore
TABLE 12B	Net Cash Expenditures of the Petroleum Industry - Hudson Bay - Offshore
TABLE 13	Net Cash Expenditures of the Petroleum Industry - Westcoast - Offshore
TABLE 13A	Net Cash Expenditures of the Petroleum Industry - Westcoast - Offshore
TABLE 13B	Net Cash Expenditures of the Petroleum Industry - Westcoast - Offshore
TABLE 14	Expenditures - Canada Oil Sands Expenditures
TABLE 15	Value of Producers' Sales - Territories
TABLE 16	Value of Producers' Sales - British Columbia
TABLE 16A	Value of Producers' Sales - British Columbia
TABLE 17	Value of Producers' Sales - Alberta
TABLE 17A	Value of Producers' Sales - Alberta
TABLE 18	Value of Producers' Sales - Saskatchewan
TABLE 18A	Value of Producers' Sales - Saskatchewan
TABLE 19	Value of Producers' Sales - Manitoba
TABLE 19A	Value of Producers' Sales - Manitoba
TABLE 20	Value of Producers' Sales - Western Canada
TABLE 20A	Value of Producers' Sales - Western Canada
TABLE 21	Value of Producers' Sales - Eastern Canada
TABLE 21A	Value of Producers' Sales - Eastern Canada
TABLE 22	Value of Producers' Sales - Canada
TABLE 22A	Value of Producers' Sales - Canada

1991 NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

	Alberta	*Sask.*	*British Columbia*	*Territories & Arctic Is.*	*Manitoba*	*Ontario*	*Quebec*	*Atlantic Provinces*	*East-Coast Offshore*	*Hudson Bay Offshore*	*West-Coast Offshore*	*CANADA*
1. EXPLORATION** —												
(a) Geological & Geophysical	395.4	26.5	125.9	22.7	..	3.8	3.2	0.1	29.7	—	—	607.3
(b) Drilling	852.0	40.6	263.2	38.2	0.6	25.0	4.4	—	80.0	—	—	1 304.0
(c) Land acquisitions & rentals	467.1	34.5	99.4	1.2	0.4	3.0	0.1	—	8.4	—	—	614.1
	1 714.5	101.6	488.5	62.1	1.0	31.8	7.7	0.1	118.1	—	—	2 525.4
2. DEVELOPMENT** —												
(a) Drilling	877.1	145.7	86.5	9.1	10.9	11.1	—	—	20.9	—	—	1 161.3
(b) Field equipment	1 111.9	145.3	102.9	12.2	4.8	7.1	—	—	521.7	—	—	1 905.9
(c) Enhanced recovery & pressure maintenance	268.1	9.0	3.0	—	—	—	—	—	—	—	—	280.1
(d) Natural Gas plants	710.8	12.8	60.7	3.7	—	0.2	—	—	—	—	—	788.2
	2 967.9	312.8	253.1	25.0	15.7	18.4	—	—	542.6	—	—	4 135.5
3. OPERATING —												
(a) Field, well and gathering operations	3 856.0	532.1	236.9	86.3	26.1	18.0	—	—	0.1	—	—	4 755.5
(b) Natural Gas plants	897.9	22.2	76.0	6.4	0.1	30.6	—	—	—	—	—	1 033.2
	4 753.9	554.3	312.9	92.7	26.2	48.6	—	—	0.1	—	—	5 788.7
4. ROYALTIES* —	2 625.0	311.9	124.0	7.6	18.2	7.6	—	—	—	—	—	3 094.3
TOTAL EXPENDITURES	12 061.3	1 280.6	1 178.5	187.4	61.1	106.4	7.7	0.1	660.8	—	—	15 543.9

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Net cash expenditures, except for royalties, do not include inter-industry transactions.
Effective 1985, Taxes (excluding income tax) are included with Field, well and gathering operations (3a).
Oil Sands expenditures are published on Table 14.

JULY 1992

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Canada

	1985	1986	1987	1988	1989	1990	1991	Cum. 47-91
1. EXPLORATION** —								
(a) Geological & Geophysical	780.1	615.7	535.9	708.3	634.5	687.5	607.3	12 125.5
(b) Drilling	3 611.5	2 337.3	1 507.2	1 739.9	1 385.6	1 355.8	1 304.0	36 342.1
(c) Land acquisitions & rentals	1 329.5	551.3	1 003.4	870.9	738.8	842.2	614.1	18 402.8
(d) Other	—	—	—	—	—	—	—	343.3
	5 721.1	3 504.3	3 046.5	3 319.1	2 758.9	2 885.5	2 525.4	67 213.7
2. DEVELOPMENT** —								
(a) Drilling	1 751.9	1 221.9	1 117.6	1 486.4	943.0	1 117.9	1 161.3	20 268.2
(b) Field equipment	1 145.3	982.5	943.6	1 244.3	1 302.9	1 505.9	1 905.9	17 142.6
(c) Secondary recovery & pressure maintenance	414.0	272.7	248.9	377.3	360.7	312.2	280.1	3 749.9
(d) Natural Gas plants	337.6	217.1	188.5	255.2	427.3	483.8	788.2	6 746.3
(e) Other	100.2	—	—	—	—	—	—	1 355.3
	3 749.0	2 694.2	2 498.6	3 363.2	3 033.9	3 419.8	4 135.5	49 262.3
3. OPERATING —								
(a) Wells including flow lines and related facilities	3 688.2	3 664.4	3 466.6	3 850.8	4 375.1	4 441.9	4 755.5	43 644.7
(b) Natural Gas plants	761.1	744.6	745.6	844.8	866.7	971.6	1 033.2	10 851.0
(c) Taxes (excluding income tax)	—	—	—	—	—	—	—	2 065.3
(d) Other	—	—	—	—	—	—	—	1 524.0
	4 449.3	4 409.0	4 212.2	4 695.6	5 241.8	5 413.5	5 788.7	58 085.0
4. ROYALTIES* —	6 634.3	3 825.3	3 160.7	2 829.9	2 942.9	3 606.2	3 094.3	72 271.3
TOTAL EXPENDITURES	20 553.7	14 436.5	12 918.0	14 207.8	13 977.5	15 325.0	15 543.9	246 832.3
AINTEREST EXPENSE (not included above)	—	—	—	—	—	—	—	1 782.1

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).
Oil Sands expenditures are on Table 14.

JULY 1992

SECTION IV
Table 2C

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Alberta

	1985	1986	1987	1988	1989	1990	1991	Cum. 47-91
1. EXPLORATION** —								
(a) Geological & Geophysical	480.5	448.9	420.0	520.9	428.5	452.0	395.4	7 662.8
(b) Drilling	1 368.3	1 021.3	1 010.8	1 089.4	838.0	950.2	852.0	17 573.3
(c) Land acquisitions & rentals	1 021.1	447.3	841.1	676.5	551.7	614.2	467.1	14 278.0
(d) Other	—	—	—	—	—	—	—	220.5
	2 869.9	1 917.5	2 271.9	2 286.8	1 818.2	2 016.4	1 714.5	39 734.6
2. DEVELOPMENT** —								
(a) Drilling	1 296.1	983.1	883.1	1 164.9	686.5	830.6	877.1	15 733.7
(b) Field equipment	902.5	853.0	768.4	1 005.2	1 023.4	1 089.4	1 111.9	13 209.5
(c) Secondary recovery & pressure maintenance	331.0	229.4	223.3	351.2	345.2	286.4	268.1	3 125.6
(d) Natural Gas plants	263.3	181.0	162.3	207.8	363.5	360.3	710.8	5 721.7
(e) Other	87.0	—	—	—	—	—	—	1 085.4
	2 879.9	2 246.5	2 037.1	2 729.1	2 418.6	2 566.7	2 967.9	38 875.9
3. OPERATING —								
(a) Wells including flow lines and related facilities	2 965.8	3 006.0	2 831.2	3 166.1	3 629.6	3 604.6	3 856.0	35 299.5
(b) Natural Gas plants	680.1	668.5	663.1	753.2	745.7	840.8	897.9	9 680.4
(c) Taxes (excluding income tax)	—	—	—	—	—	—	—	1 608.1
(d) Other	—	—	—	—	—	—	—	1 372.9
	3 645.9	3 674.5	3 494.3	3 919.3	4 375.3	4 445.4	4 753.9	47 960.9
4. ROYALTIES* —	5 784.4	3 361.7	2 625.5	2 456.9	2 527.3	3 085.0	2 625.0	63 474.7
TOTAL EXPENDITURES	15 180.1	11 200.2	10 428.8	11 392.1	11 139.4	12 113.5	12 061.3	190 046.1
INTEREST EXPENSE (not included above)	—	—	—	—	—	—	—	1 677.5

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).
Oil Sands expenditures are on Table 14.

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Saskatchewan

	1985	1986	1987	1988	1989	1990	1991	Cum. 47-91
1. EXPLORATION** —								
(a) Geological & Geophysical	71.8	34.9	36.8	38.1	29.7	35.1	26.5	611.8
(b) Drilling	130.7	53.3	50.5	86.1	43.0	57.2	40.6	1 068.0
(c) Land acquisitions & rentals	155.9	26.8	67.9	46.6	55.0	52.8	34.5	1 343.1
(d) Other	—	—	—	—	—	—	—	64.5
	358.4	115.0	155.2	170.8	127.7	145.1	101.6	3 087.4
2. DEVELOPMENT** —								
(a) Drilling	323.5	142.4	113.6	190.9	137.9	155.0	145.7	2 359.1
(b) Field equipment	165.4	76.8	82.7	138.2	125.7	152.9	145.3	1 586.4
(c) Secondary recovery & pressure maintenance	66.3	28.1	22.2	20.9	12.9	23.8	9.0	377.2
(d) Natural Gas plants	15.9	8.6	4.4	24.7	11.6	13.6	12.8	138.9
(e) Other	7.8	—	—	—	—	—	—	60.5
	578.9	255.9	222.9	374.7	288.1	345.3	312.8	4 522.1
3. OPERATING —								
(a) Wells including flow lines and related facilities	494.0	466.0	437.1	463.1	454.4	509.7	532.1	5 477.3
(b) Natural Gas plants	20.8	15.9	18.4	22.9	25.4	25.1	22.2	233.4
(c) Taxes (excluding income tax)	—	—	—	—	—	—	—	332.6
(d) Other	—	—	—	—	—	—	—	57.9
	514.8	481.9	455.5	486.0	479.8	534.8	554.3	6 101.2
4. ROYALTIES* —	650.8	301.7	375.8	245.3	268.2	359.5	311.9	6 558.6
TOTAL EXPENDITURES	2 102.9	1 154.5	1 209.4	1 276.8	1 163.8	1 384.7	1 280.6	20 269.3
INTEREST EXPENSE (not included above)	—	—	—	—	—	—	—	46.8

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

JULY 1992

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

British Columbia

	1985	1986	1987	1988	1989	1990	1991	Cum. 48-91
1. EXPLORATION** —								
(a) Geological & Geophysical	53.7	28.5	29.3	61.8	82.6	135.6	125.9	1 261.1
(b) Drilling	120.2	102.9	60.3	109.8	154.8	188.0	263.2	2 471.2
(c) Land acquisitions & rentals	141.7	67.9	86.0	140.2	127.2	167.7	99.4	2 415.5
(d) Other	—	—	—	—	—	—	—	41.0
	315.6	199.3	175.6	311.8	364.6	491.3	488.5	6 188.8
2. DEVELOPMENT** —								
(a) Drilling	61.2	59.2	72.9	92.9	97.8	107.6	86.5	1 258.7
(b) Field equipment	31.0	34.3	55.2	61.4	107.9	139.9	102.9	951.9
(c) Secondary recovery & pressure maintenance	12.9	14.0	0.7	4.1	2.3	1.6	3.0	65.3
(d) Natural Gas plants	52.0	15.4	17.8	15.7	50.2	55.2	60.7	644.9
(e) Other	4.2	—	—	—	—	—	—	52.3
	161.3	122.9	146.6	174.1	258.2	304.3	253.1	2 973.1
3. OPERATING —								
(a) Wells including flow lines and related facilities	151.2	122.8	116.0	131.6	182.4	210.6	236.9	1 895.2
(b) Natural Gas plants	33.9	30.8	35.2	39.8	52.2	69.1	76.0	553.9
(c) Taxes (excluding income tax)	—	—	—	—	—	—	—	64.1
(d) Other	—	—	—	—	—	—	—	50.8
	185.1	153.6	151.2	171.4	234.6	279.7	312.9	2 564.0
4. ROYALTIES* —	136.9	126.2	119.6	97.9	112.3	118.9	124.0	1 652.9
TOTAL EXPENDITURES	798.9	602.0	593.0	755.2	969.7	1 194.2	1 178.5	13 378.8
INTEREST EXPENSE (not included above)	—	—	—	—	—	—	—	43.5

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Territories & Arctic Islands

	1986	1987	1988	1989	1990	1991	Cum. 51-91
1. EXPLORATION** —							
(a) Geological & Geophysical	41.5	29.8	61.9	71.2	41.9	22.7	1 564.6
(b) Drilling	486.3	165.4	201.1	231.7	57.1	38.2	7 773.7
(c) Land acquisitions & rentals	1.9	0.1	0.9	1.1	1.7	1.2	117.4
(d) Other	—	—	—	—	—	—	8.5
	529.7	195.3	263.9	304.0	100.7	62.1	9 464.2
2. DEVELOPMENT** —							
(a) Drilling	17.4	26.6	11.9	1.0	—	9.1	413.1
(b) Field equipment	4.7	27.9	20.5	3.7	14.1	12.2	513.3
(c) Secondary recovery & pressure maintenance	0.5	2.2	0.9	0.2	0.3	—	172.3
(d) Natural Gas plants	0.9	—	0.2	1.0	12.7	3.7	40.9
(e) Other	—	—	—	—	—	—	109.6
	23.5	56.7	33.5	5.9	27.1	25.0	1 249.2
3. OPERATING —							
(a) Wells including flow lines and related facilities	38.1	47.6	52.9	73.9	74.0	86.3	527.0
(b) Natural Gas plants	—	—	..	4.0	5.2	6.4	27.6
(c) Taxes (excluding income tax)	—	—	—	—	—	—	1.4
(d) Other	—	—	—	—	—	—	28.1
	38.1	47.6	52.9	77.9	79.2	92.7	106.1
4. ROYALTIES* —	4.8	7.0	5.0	6.1	8.7	7.6	89.3
TOTAL EXPENDITURES	596.1	306.6	355.3	393.9	215.7	187.4	11 386.8
INTEREST EXPENSE (not included above)	—	—	—	—	—	—	4.0

NOTE: No Expenditures prior to 1952 available.

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Manitoba

	1986	1987	1988	1989	1990	1991	Cum. 51-91
1. EXPLORATION** —							
(a) Geological & Geophysical	1.6	3.1	2.9	0.6	0.2	..	53.1
(b) Drilling	7.5	8.2	4.4	1.4	2.4	0.6	100.2
(c) Land acquisitions & rentals	3.0	3.7	1.9	0.9	1.1	0.4	113.1
(d) Other	—	—	—	—	—	—	5.9
	12.1	15.0	9.2	2.9	3.7	1.0	272.3
2. DEVELOPMENT** —							
(a) Drilling	13.0	12.4	9.4	7.4	14.9	10.9	223.3
(b) Field equipment	7.8	3.0	5.5	3.3	4.9	4.8	94.5
(c) Secondary recovery & pressure maintenance	0.1	..	0.2	0.1	0.1	..	5.2
(d) Natural Gas plants	..	—	0.4	0.1	..	..	4.8
(e) Other	—	—	—	—	—	—	3.2
	20.9	15.4	15.5	10.9	19.0	15.7	331.0
3. OPERATING —							
(a) Wells including flow lines and related facilities	18.0	21.1	22.5	21.3	29.3	26.1	282.9
(b) Natural Gas plants	..	0.1	0.1	..	0.1	0.1	0.9
(c) Taxes (excluding income tax)	—	—	—	—	—	—	45.4
(d) Other	—	—	—	—	—	—	3.0
	18.0	21.2	22.6	21.3	29.4	26.2	332.2
4. ROYALTIES* —	21.1	23.3	16.5	18.9	23.4	18.2	383.2
TOTAL EXPENDITURES	72.1	74.9	63.8	54.0	75.5	61.1	1 318.7
INTEREST EXPENSE (not included above)	—	—	—	—	—	—	0.6

NOTE: No Expenditures prior to 1951 available.

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Ontario

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Cum. 68-91
1. EXPLORATION** —															
(a) Geological & Geophysical	7.2	4.9	8.0	2.0	1.3	0.8	1.1	2.1	1.9	1.4	4.8	2.3	3.8	3.8	66.2
(b) Drilling	9.6	10.0	17.2	10.0	11.9	15.1	21.2	21.4	14.7	9.3	23.5	23.6	17.2	25.0	265.4
(c) Land acquisitions & rentals	10.4	3.0	4.5	4.1	3.1	5.0	1.8	2.6	2.3	2.5	3.1	2.9	4.1	3.0	69.3
(d) Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	27.2	17.9	29.7	16.1	16.3	20.9	24.1	26.1	18.9	13.2	31.4	28.8	25.1	31.8	400.9
2. DEVELOPMENT** —															
(a) Drilling	9.6	13.4	17.9	18.9	20.9	22.2	20.6	20.1	6.8	8.8	16.4	11.9	10.7	11.1	236.0
(b) Field equipment	3.7	3.8	8.3	..	5.5	2.3	5.1	3.1	4.8	6.4	6.6	2.8	6.3	7.1	90.9
(c) Secondary recovery & pressure maintenance	—	..	—	..	—	1.1	0.8	0.3	0.6	0.1	..	—	—	..	3.8
(d) Natural Gas plants	4.5	18.6	36.2	14.3	6.3	2.7	1.5	6.0	11.2	4.0	6.4	0.9	42.0	0.2	194.9
(e) Other	0.6	0.2	0.3	6.9	—	0.3	0.6	0.4	—	—	—	—	—	—	13.5
	18.4	36.0	62.7	40.1	32.7	28.6	28.6	29.9	23.4	19.3	29.4	15.6	59.0	18.4	539.1
3. OPERATING —															
(a) Wells including flow lines and related facilities	3.7	4.3	4.4	5.1	4.1	9.8	9.0	14.0	13.6	13.6	14.6	13.4	13.6	18.0	161.0
(b) Natural Gas plants	3.5	16.9	18.8	16.7	11.9	28.5	27.5	26.3	29.2	28.9	28.8	39.4	31.3	30.6	362.9
(c) Taxes (excluding income tax)	0.3	0.2	0.5	1.1	1.7	3.5	3.6	—	—	—	—	—	—	—	13.1
(d) Other	1.4	1.6	0.8	0.1	—	—	—	—	—	—	—	—	—	—	7.9
	8.9	23.0	24.5	23.0	17.7	41.8	40.1	40.3	42.8	42.5	43.4	52.8	44.9	48.6	544.9
4. ROYALTIES* —	1.7	3.0	3.3	4.0	5.6	8.0	13.2	11.1	9.7	9.4	8.3	10.1	10.7	7.6	112.3
TOTAL EXPENDITURES	56.2	79.9	120.2	83.2	72.3	99.3	106.0	107.4	94.8	84.4	112.5	107.3	139.7	106.4	1 597.2
INTEREST EXPENSE (not included above)	0.3	..	3.3	—	—	—	—	—	—	—	—	—	—	—	4.5

NOTE: No Expenditures prior to 1968 available.

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

JULY 1992

SECTION IV
Table 8A

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Quebec

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Cum. 69-91
1. EXPLORATION** —														
(a) Geological & Geophysical	1.2	2.0	2.3	6.6	1.3	0.6	0.1	1.4	0.8	..	0.6	0.4	3.2	41.7
(b) Drilling	7.9	6.2	6.2	3.5	0.8	—	1.0	—	0.2	0.5	0.1	0.1	4.4	63.0
(c) Land acquisitions & rentals	0.2	0.3	0.3	0.7	0.2	0.2	—	..	..	..	..	0.1	0.1	8.1
(d) Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	9.3	8.5	8.8	10.8	2.3	0.8	1.1	1.4	1.0	0.5	0.7	0.6	7.7	112.8
2. DEVELOPMENT** —														
(a) Drilling	—	—	—	—	—	—	0.9	—	0.1	..	0.2	—	—	1.2
(b) Field equipment	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1
(c) Secondary recovery & pressure maintenance	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(d) Natural Gas plants	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(e) Other	—	—	0.1	—	—	—	—	—	—	—	—	—	—	0.1
	—	—	0.1	—	—	—	0.9	—	0.1	..	0.2	—	—	1.4
3. OPERATING —														
(a) Wells including flow lines and related facilities	—	—	—	—	—	—	—	—	—	—	0.1	0.1	—	0.2
(b) Natural Gas plants	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Taxes (excluding income tax)	..	—	—	—	—	—	—	—	—	—	—	—	—	—
(d) Other	—	—	—	—	—	—	—	—	—	—	—	—	—	1.1
	..	—	—	—	—	—	—	—	—	—	0.1	0.1	—	1.3
4. ROYALTIES* —	—	—	—	—	—	—	0.1	0.1	0.1	—	..	—	—	0.3
TOTAL EXPENDITURES	9.3	8.5	8.9	10.8	2.3	0.8	2.1	1.5	1.2	0.5	1.0	0.7	7.7	115.8
INTEREST EXPENSE (not included above)	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6

NOTE: No Expenditures prior to 1969 available.

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

JULY 1992

SECTION IV
Table 9A

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Atlantic Provinces

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Cum. 69-91
1. EXPLORATION** —														
(a) Geological & Geophysical	2.3	3.6	5.8	6.0	7.0	4.1	1.0	0.7	0.3	0.1	..	0.1	0.1	39.4
(b) Drilling	3.8	—	2.6	6.0	1.3	2.2	5.9	3.4	0.1	1.0	—	0.3	—	38.6
(c) Land acquisitions & rentals	0.8	2.1	0.4	0.4	0.4	0.3	..	0.2	0.1	0.1	..	..	..	9.1
(d) Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	6.9	5.7	8.8	12.4	8.7	6.6	6.9	4.3	0.5	1.2	..	0.4	0.1	87.1
2. DEVELOPMENT** —														
(a) Drilling	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) Field equipment	—	—	—	—	—	—	—	—	1.1	—	—	—	—	1.4
(c) Secondary recovery & pressure maintenance	—	—	—	—	—	—	—	—	—	0.4	—	—	—	0.4
(d) Natural Gas plants	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(e) Other	—	—	—	—	—	—	—	—	—	—	—	—	—	1.4
	—	—	—	—	—	—	—	—	1.1	0.4	—	—	—	3.2
3. OPERATING —														
(a) Wells including flow lines and related facilities	0.2	—	—	—	—	—	—	—	—	—	—	—	—	1.5
(b) Natural Gas plants	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Taxes (excluding income tax)	..	—	—	—	—	—	—	—	—	—	—	—	—	—
(d) Other	—	—	—	—	—	—	—	—	—	—	—	—	—	0.4
	0.2	—	—	—	—	—	—	—	—	—	—	—	—	1.9
4. ROYALTIES* —	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL EXPENDITURES	7.1	5.7	8.8	12.4	8.7	6.6	6.9	5.4	0.9	1.2	..	0.4	0.1	92.2
INTEREST EXPENSE (not included above)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

NOTE: No Expenditures prior to 1968 available.

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

JULY 1992

SECTION IV
Table 10A

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Eastcoast - Offshore

	1988	1989	1990	1991	Cum. 67-91
1. EXPLORATION** —					
(a) Geological & Geophysical	17.1	18.6	18.4	29.7	778.6
(b) Drilling	224.1	93.0	83.3	80.0	6 909.0
(c) Land acquisitions & rentals	1.6	—	0.5	8.4	44.7
(d) Other	—	—	—	—	2.5
	242.8	111.6	102.2	118.1	7 734.8
2. DEVELOPMENT** —					
(a) Drilling	—	0.3	—	20.9	42.8
(b) Field equipment	6.9	36.1	98.4	521.7	689.7
(c) Secondary recovery & pressure maintenance	—	—	—	—	—
(d) Natural Gas plants	—	—	—	—	—
(e) Other	—	—	—	—	36.8
	6.9	36.4	98.4	542.6	769.3
3. OPERATING —					
(a) Wells including flow lines and related facilities	—	—	—	0.1	0.2
(b) Natural Gas plants	—	—	—	—	—
(c) Taxes (excluding income tax)	—	—	—	—	0.6
(d) Other	—	—	—	—	1.9
	—	—	—	0.1	2.7
4. ROYALTIES* —	—	..	..	—	..
TOTAL EXPENDITURES	249.7	148.0	200.6	660.8	8 506.8
INTEREST EXPENSE (not included above)	—	—	—	—	4.6

NOTE: No Expenditures prior to 1969 available.

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Hudson Bay - Offshore

	1988	1989	1990	1991	Cum. 67-91
1. EXPLORATION** —					
(a) Geological & Geophysical	0.2	—	—	—	39.6
(b) Drilling	—	—	—	—	62.3
(c) Land acquisitions & rentals	..	—	—	—	3.4
(d) Other	—	—	—	—	—
	0.2	—	—	—	105.3
2. DEVELOPMENT** —					
(a) Drilling	—	—	—	—	—
(b) Field equipment	—	—	—	—	—
(c) Secondary recovery & pressure maintenance	—	—	—	—	—
(d) Natural Gas plants	—	—	—	—	—
(e) Other	—	—	—	—	—
	—	—	—	—	—
3. OPERATING —					
(a) Wells including flow lines and related facilities	—	—	—	—	—
(b) Natural Gas plants	—	—	—	—	—
(c) Taxes (excluding income tax)	—	—	—	—	—
(d) Other	—	—	—	—	—
	—	—	—	—	—
4. ROYALTIES* —	—	—	—	—	—
TOTAL EXPENDITURES	0.2	—	—	—	105.3
INTEREST EXPENSE (not included above)	—	—	—	—	—

NOTE: No Expenditures prior to 1967 available.

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

NET CASH EXPENDITURES OF THE PETROLEUM INDUSTRY

MILLION DOLLARS

Westcoast - Offshore

	1988	1989	1990	1991	Cum. 67-91
1. EXPLORATION** —					
(a) Geological & Geophysical	0.5	0.4	—	—	6.6
(b) Drilling	—	—	—	—	17.4
(c) Land acquisitions & rentals	—	—	—	—	0.9
(d) Other	—	—	—	—	0.4
	0.5	0.4	—	—	25.3
2. DEVELOPMENT** —					
(a) Drilling	—	—	—	—	—
(b) Field equipment	—	—	—	—	—
(c) Secondary recovery & pressure maintenance	—	—	—	—	—
(d) Natural Gas plants	—	—	—	—	—
(e) Other	—	—	—	—	—
	—	—	—	—	—
3. OPERATING —					
(a) Wells including flow lines and related facilities	—	—	—	—	—
(b) Natural Gas plants	—	—	—	—	—
(c) Taxes (excluding income tax)	—	—	—	—	—
(d) Other	—	—	—	—	—
	—	—	—	—	—
4. ROYALTIES* —	—	—	—	—	—
TOTAL EXPENDITURES	0.5	0.4	—	—	25.3
INTEREST EXPENSE (not included above)	—	—	—	—	—

NOTE: No Expenditures prior to 1967 available.

*Net of incentive credits where applicable.

**Before P.I.P. grants.

NOTE: Effective 1985, Taxes (3c) are included with wells including flow lines, etc. (3a).

CANADA OIL SANDS EXPENDITURES

Million Dollars

	Capital Expenditures	Operating Costs	Royalties	Total
1958	0.5	—	—	0.5
1959	1.2	—	—	1.2
1960	1.2	—	—	1.2
1961	1.7	—	—	1.7
1962	25.0	—	—	25.0
1963	40.5	—	—	40.5
1964	80.4	—	—	80.4
1965	81.6	—	—	81.6
1966	131.5	—	—	131.5
1967	72.5	—	0.1	72.6
1968	38.8	9.5	1.1	49.4
1969	16.9	36.7	2.0	55.6
1970	24.8	36.3	1.4	62.5
1971	26.9	46.5	1.8	75.2
1972	13.7	48.7	3.6	66.0
1973	27.5	60.7	8.1	96.3
1974	102.0	76.9	21.0	199.9
1975	442.5	90.6	24.5	557.6
1976	623.0	144.6	31.5	799.1
1977	550.3	251.0	52.5	853.8
1978	399.8	550.3	59.5	1 009.6
1979	245.2	540.0	56.0	841.2
1980	430.5	771.3	248.0	1 449.8
1981	541.1	756.0	238.0	1 535.1
1982	386.1	1 051.5	273.5	1 711.1
1983	422.6	1 048.2	395.8	1 866.6
1984	510.3	1 064.3	179.0	1753.6
1985	1 131.5	1 225.6	221.0	2 578.1
1986	612.8	1 208.3	12.0	1 833.1
1987	539.5	1 146.7	23.0	1 709.2
1988	863.6	1 483.0	19.0	2 365.6
1989	422.4	1 515.3	27.7	1 965.4
1990	730.7	1 539.4	47.0	2 317.1
1991	1 090.5	1 554.1	27.0	2 671.6
	10 629.1	16 255.5	1 974.1	28 858.7

Note: In the 1947-57 period, oil sands expenditures were nominal and are included in expenditures in the conventional sector (Table 3).

Includes the bi-provincial upgrader effective 1990.

VALUE OF PRODUCERS' SALES

Thousand Dollars

Territories

	Crude Oil	Natural Gas	Pentanes Plus	Propane	Butanes	Sulphur	Total
1947	500	—	—	—	—	—	500
1948	677	—	—	—	—	—	677
1949	353	—	—	—	—	—	353
1950	335	—	—	—	—	—	335
1951	330	—	—	—	—	—	330
1952	379	—	—	—	—	—	379
1953	257	—	—	—	—	—	257
1954	385	—	—	—	—	—	385
1955	1 040	—	—	—	—	—	1 040
1956	940	—	—	—	—	—	940
1957	253	—	—	—	—	—	253
1958	839	—	—	—	—	—	839
1959	765	—	—	—	—	—	765
1960	644	—	—	—	—	—	644
1961	713	—	—	—	—	—	713
1962	624	—	—	—	—	—	624
1963	457	—	—	—	—	—	457
1964	565	—	—	—	—	—	565
1965	742	—	—	—	—	—	742
1966	853	—	—	—	—	—	853
1967	533	—	—	—	—	—	533
1968	909	—	—	—	—	—	909
1969	548	—	—	—	—	—	548
1970	1 142	—	—	—	—	—	1 142
1971	1 202	113	—	—	—	—	1 315
1972	1 058	1 443	—	—	—	—	2 501
1973	2 240	3 653	—	—	—	—	5 893
1974	3 241	3 796	—	—	—	—	7 037
1975	4 479	18 408	—	—	—	—	22 887
1976	3 581	32 178	—	—	—	—	35 759
1977	4 176	34 613	—	—	—	—	38 789
1978	6 241	31 085	—	—	—	—	37 326
1979	7 573	39 200	—	—	—	—	46 773
1980	10 771	41 955	—	—	—	—	52 726
1981	8 363	39 359	—	—	—	—	47 722
1982	11 133	16 901	—	—	—	—	28 034
1983	20 016	14 758	—	—	—	—	34 774
1984	16 277	15 430	—	—	—	—	31 707
1985	180 286	27 300	—	—	—	—	207 586
1986	106 700	13 100	—	—	—	—	119 800
1987	147 264	8 545	—	—	—	—	155 809
1988	122 153	4 592	—	—	—	—	126 745
1989	169 665	5 333	—	—	—	—	174 998
1990	247 807	3 972	—	—	—	—	251 779
1991	202 437	14 180	—	—	—	—	216 617
	1 291 446	369 914	—	—	—	—	1 661 360

VALUE OF PRODUCERS' SALES

Thousand Dollars

British Columbia

	Crude Oil & Condensate	Natural Gas	Pentanes Plus	Propane	Butanes	Sulphur	Total
1986	247 300	323 664	14 700	11 700	10 300	32 800	640 464
1987	306 009	383 425	27 231	9 051	9 879	20 380	755 975
1988	207 412	387 497	21 851	12 007	11 572	18 238	658 577
1989	249 387	554 715	31 843	13 739	10 157	11 209	871 050
1990	296 288	500 755	31 880	14 416	9 663	12 953	865 955
1991	266 623	602 537	26 478	19 548	14 878	13 922	943 986
	4 825 459	5 922 914	210 333	98 483	85 319	133 672	11 276 180

VALUE OF PRODUCERS' SALES

Thousand Dollars

Alberta*

	Crude Oil & Condensate	Synthetic** Crude Oil	Natural Gas	Pentanes Plus	Propane	Butanes	Sulphur	Ethane	Total
1986	6 268 100	1 710 000***	5 048 900	709 400	405 400	297 400	683 200	331 400	15 453 800
1987	7 846 817	2 203 506***	4 195 309	872 948	316 527	320 418	596 080	309 749	16 661 354
1988	6 087 782	1 696 201***	4 373 621	699 994	286 860	260 234	583 102	312 619	14 300 413
1989	6 896 720	2 161 150***	4 572 145	860 620	307 219	201 141	396 732	213 064	15 608 791
1990	8 209 930	2 799 416***	4 667 014	1 061 809	564 306	332 258	368 108	351 600	18 354 441
1991	6 632 909	2 254 699***	4 343 764	926 284	501 281	347 539	329 504	340 772	15 676 752
	135 939 606	26 307 675	80 366 752	14 556 996	7 546 810	6 159 465	697 612	1 859 204	279 932 344

* Does not include experimental crude and ethane until 1986. Experimental included with crude oil in 1986.

** Does not represent the true value of all synthetic crude oil.

*** Includes bitumen.

JULY 1992

VALUE OF PRODUCERS' SALES

Thousand Dollars

Saskatchewan

	Crude Oil & Condensate	Natural Gas	Pentanes Plus	Propane	Butanes	Sulphur	Ethane	Total
1986	1 172 400	129 800	NGL	17 600		—	700	1 320 500
1987	1 511 466	166 406		18 080		—	—	1 695 952
1988	1 034 704	201 301		10 187		—	2 112	1 248 304
1989	1 237 286	275 774		8 022		—	1 410	1 522 492
1990	1 523 880	339 980		13 044		—	2 138	1 879 042
1991	1 186 480	350 858		11 676		—	1 832	1 550 846
	23 287 749	1 932 916		217 029		666	21 618	25 459 978

Note: Effective 1982 pentanes plus, propane and butanes are combined into NGL.

JULY 1992

VALUE OF PRODUCERS' SALES

Thousand Dollars

Manitoba

	Crude Oil	Natural Gas	Pentanes Plus	Propane	Butanes	Sulphur	Total
1987	109 142	—	—	173	113	—	109 428
1988	78 655	—	—	151	101	—	78 907
1989	90 341	—	—	216	105	—	90 662
1990	114 980	—	—	398	186	—	115 564
1991	83 601	—	—	244	118	—	83 963
	1 774 562	—	—	1 482	723	—	1 776 767

JULY 1991

VALUE OF PRODUCERS' SALES

Thousand Dollars

Western Canada*

	Crude Oil & Condensate	Synthetic** Crude Oil	Natural Gas	Pentanes Plus	Propane	Butanes	Sulphur	Ethane***	Total
1986	7 889 900	1 710 000****	5 515 464	NGL	1 466 900		716 000	332 100	17 630 364
1987	9 920 698	2 203 506****	4 753 685		1 574 420		616 460	309 749	19 378 518
1988	7 530 706	1 696 201****	4 967 011		1 302 957		601 340	314 731	16 412 946
1989	8 643 399	2 161 150****	5 407 967		1 433 062		407 941	214 474	18 267 993
1990	10 392 885	2 799 416****	5 514 404		2 027 960		381 061	353 738	21 469 464
1991	8 372 050	2 254 699****	5 311 339		1 848 046		343 426	342 604	18 472 164
	167 118 822	26 307 675	88 595 179		28 876 640		7 330 174	1 880 822	320 109 312

Note: Effective 1982 NGL represents value of pentanes plus, propane and butanes.

* Does not include experimental crude and Alberta ethane until 1986.

** Does not represent the true value of all synthetic crude oil.

*** Represents value of Saskatchewan production only until 1985.

**** Includes Bitumen.

JULY 1992

VALUE OF PRODUCERS' SALES

Thousand Dollars

Eastern Canada*

	Crude Oil & Condensate	Natural Gas	Pentanes Plus	Propane	Butanes	Sulphur	Total
1987	'9 258	61 954	—	—	—	—	81 212
1988	22 370	55 893	—	—	—	—	78 263
1989	34 464	51 096	—	—	—	—	85 560
1990	44 375	46 981	—	—	—	—	91 356
1991	35 716	46 627	—	—	—	—	82 343
	377 464	937 821	—	—	—	—	1 315 285

*Quebec, New Brunswick & Ontario

JULY 1992

VALUE OF PRODUCERS' SALES

Thousand Dollars

Canada*

	Crude Oil & Condensate	Synthetic** Crude Oil	Natural Gas	Pentanes Plus	Propane	Butanes	Sulphur	Ethane***	Total
1986	7 907 200	1 710 000****	5 580 564	NGL	1 466 900		716 000	332 100	17 712 764
1987	9 939 956	2 203 506****	4 815 639		1 574 420		616 460	309 749	19 459 730
1988	7 553 076	1 696 201****	5 022 904		1 302 957		601 340	314 731	16 491 209
1989	8 677 863	2 161 150****	5 459 063		1 433 062		407 941	214 474	18 353 553
1990	10 437 260	2 799 416****	5 561 385		2 027 960		381 061	353 738	21 560 820
1991	8 407 766	2 254 699****	5 357 966		1 848 046		343 426	342 604	18 554 507
	167 496 286	26 307 675	89 533 000		28 876 640		7 330 174	1 880 822	321 424 597

Note: Effective 1982 NGL represents value of pentanes plus, propane and butanes.

* Does not include experimental crude and Alberta ethane until 1986.

** Does not represent the true value of all synthetic crude oil.

*** Represents value of Saskatchewan production only until 1985.

**** Includes Bitumen.

JULY 1992

WESTERN CANADA*
AVERAGE PRICES OF CRUDE OIL & NATURAL GAS

	Crude Oil Average Wellhead Price Dollars Per Cubic Metre	Natural Gas Average Wellhead/Plant Gate Price Dollars Per Thousand Cubic Metres	Consumer Price Index Numbers** 1947 = 100
1947	16.00	2.40	100.0
1948	18.91	2.32	114.0
1949	17.75	2.24	117.6
1950	18.15	2.08	121.1
1951	15.62	2.19	133.9
1952	14.67	3.33	137.3
1953	15.50	3.30	135.9
1954	15.91	3.28	136.7
1955	14.78	3.32	136.9
1956	14.88	3.41	138.9
1957	15.77	3.54	143.4
1958	15.27	3.38	147.3
1959	14.60	3.18	148.7
1960	14.48	3.42	150.7
1961	14.56	4.06	152.1
1962	13.98	4.31	154.0
1963	14.90	4.73	156.6
1964	15.34	4.92	159.4
1965	15.38	4.87	163.3
1966	15.42	5.08	169.4
1967	15.40	5.12	175.3
1968	15.43	5.10	182.6
1969	15.15	5.03	190.9
1970	15.56	5.26	197.2
1971	17.22	5.22	202.8
1972	17.36	5.43	212.6
1973	21.44	5.99	228.6
1974	35.87	9.49	253.5
1975	45.09	19.26	280.9
1976	52.57	31.31	302.0
1977	63.22	41.70	326.2
1978	75.70	48.36	355.4
1979	81.95	54.99	387.8
1980	97.00	75.48	427.1
1981	117.10	80.61	480.4
1982	163.06	87.80	532.3
1983	197.92	93.23	563.4
1984	208.37	96.79	587.7
1985	220.98	93.57	611.0
1986	113.91	73.47	636.0
1987	138.26	58.55	663.9
1988	101.08	52.78	690.8
1989	121.88	53.77	725.4
1990	148.86	54.32	760.4
1991	120.78	48.28	803.0

* Includes Alberta, British Columbia, Manitoba, Saskatchewan & Territories.

** Converted for illustrative purposes from base period 1971 = 100.

JULY 1992

AVERAGE PRICES OF CRUDE OIL & NATURAL GAS BY PROVINCE

	Crude Oil (1)				Natural Gas (2)		
	British Columbia	Alberta	Saskatchewan	Manitoba	British Columbia	Alberta	Saskatchewan
1951	—	15.87	7.37	13.48	—	2.17	3.54
1952	—	14.92	7.59	10.69	—	3.32	3.72
1953	—	15.62	7.85	15.91	—	3.29	3.68
1954	—	16.37	8.86	16.30	1.50	3.28	3.56
1955	10.87	15.29	9.72	14.45	1.80	3.32	3.28
1956	12.67	15.55	10.43	14.59	3.00	3.42	3.33
1957	12.72	16.41	13.25	15.74	2.23	3.63	3.28
1958	12.37	15.88	13.49	15.40	2.14	3.83	2.74
1959	11.47	15.12	12.92	14.46	2.19	3.39	3.47
1960	11.10	15.09	12.45	14.12	3.20	3.46	3.55
1961	11.78	14.89	12.96	14.23	3.25	4.29	3.56
1962	10.67	14.23	13.77	15.22	3.34	4.51	3.67
1963	11.46	15.53	14.06	15.32	3.60	4.94	3.76
1964	11.70	16.07	14.34	15.24	3.64	5.17	3.77
1965	12.46	16.12	14.32	15.61	3.71	5.10	4.04
1966	12.90	16.18	14.25	15.74	3.82	5.33	4.48
1967	13.61	16.00	14.35	15.74	3.50	5.49	4.82
1968	13.64	16.08	14.12	15.78	3.41	5.51	4.70
1969	13.93	15.61	14.07	15.84	3.37	5.46	3.89
1970	14.49	16.07	14.00	15.82	3.34	5.69	4.60
1971	15.87	17.78	15.41	17.34	3.39	5.60	4.60
1972	15.45	17.89	15.40	17.46	3.59	5.89	4.56
1973	19.25	21.91	19.22	21.23	3.57	6.62	4.81
1974	33.06	36.34	33.66	36.02	5.43	10.46	5.22
1975	38.27	45.64	43.09	44.84	7.14	21.79	6.01
1976	42.07	53.46	49.72	52.95	11.43	35.34	7.33
1977	55.38	64.24	59.07	64.17	20.80	45.69	10.92
1978	66.90	76.78	71.28	76.80	24.39	52.57	15.14
1979	72.61	82.93	77.35	82.97	28.63	59.84	14.63
1980	92.18	97.69	92.22	97.52	31.44	82.51	16.40
1981	115.87	118.17	110.75	118.03	36.98	87.19	16.56
1982	160.82	161.51	175.47	172.68	43.71	94.31	19.07
1983	193.42	200.12	186.88	206.73	45.22	100.39	38.18
1984	207.53	209.96	201.16	213.41	49.94	103.68	50.80
1985	213.64	214.33	204.52	219.38	54.53	99.00	57.63
1986	121.41	117.86	100.28	115.77	45.11	77.74	53.73
1987	144.99	142.03	125.17	139.64	45.08	59.98	64.60
1988	108.56	105.38	84.47	102.26	42.86	54.02	50.54
1989	130.14	125.93	106.36	124.66	48.54	54.77	49.36
1990	151.88	154.61	125.31	155.85	47.51	55.18	54.18
1991	130.91	126.95	95.76	117.04	43.64	48.65	53.12

(1) Average Wellhead Price ($ per M^3)

(2) Average Wellhead/Plant Gate Price ($ per 10^3M^3)

JULY 1992

IMPORT CRUDE OIL PRICES BY PERIOD OF LOADING

	Average cost of imports at Montreal U.S. $/m³	*Exchange rate*	*Average cost of imports at Montreal (1) Cdn. $/m³*	*Domestic price Montreal Cdn. $/m³*
1971	19.19	1.0098	19.51	—
1972	19.51	0.9905	19.19	—
1973	25.17	1.1001	27.69	—
1974	71.10	0.9800	69.54	—
1975	77.40	1.0200	78.73	—
1976	81.52	0.9900	80.38	—
1977	88.26	1.0600	93.86	—
1978	88.67	1.1400	101.15	—
1979	120.38	1.1700	140.96	—
1980	199.43	1.1700	233.21	—
1981	224.10	1.2000	268.66	—
1982	210.72	1.2300	259.91	—
1983	186.60	1.2300	229.97	—
1984	186.11	1.3000	241.02	—
1985	180.17	1.3700	246.04	217.46
1986	103.25	1.3900	143.69	129.79
1987	120.11	1.3300	159.26	155.95
1988	101.76	1.2300	125.24	119.57
1989	121.81	1.1800	144.18	143.38
1990	150.61	1.1700	175.69	174.06
1991	141.36	1.1500	162.07	149.25

(1) 1971 - 1973 price based on "Arabian Light" crude. 1974 to date based on actual.

JULY 1992

REPRESENTATIVE RETAIL PRICES — REGULAR UNLEADED GASOLINE

Cents per litre

	Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada
1980	32.1	30.6	28.9	28.0	28.8	28.5	27.0	27.7	22.8	27.8	27.9
1981	42.5	42.2	37.8	37.5	39.9	38.4	36.0	37.7	30.8	38.3	37.9
1982	50.3	50.1	46.4	44.7	53.2	45.0	40.9	38.9	36.2	44.2	45.6
1983	55.1	54.4	51.3	50.5	55.7	46.2	47.3	40.3	40.7	48.2	48.3
1984	57.7	57.2	53.9	51.7	57.7	48.6	48.3	43.7	42.8	51.8	50.7
1985	62.5	59.8	58.5	56.1	60.4	50.9	51.6	46.5	45.8	55.6	53.5
1986	57.7	53.6	51.9	52.9	54.6	45.5	48.9	38.0	40.4	47.2	47.7
1987	56.3	53.7	50.3	48.8	57.0	48.2	47.8	44.6	43.8	50.3	50.1
1988	55.2	52.7	50.3	50.2	56.8	47.7	45.4	45.8	41.1	48.2	49.3
1989	57.0	52.7	50.9	52.2	57.1	50.1	48.5	49.3	44.8	52.9	51.6
1990	63.8	58.9	57.6	57.5	63.0	56.6	55.6	55.0	53.9	61.5	58.4
1991	66.3	64.4	62.4	59.7	64.2	54.7	53.2	47.7	50.2	58.1	57.0
— Jan.	76.5	72.9	72.8	69.3	72.2	58.1	64.8	56.2	64.0	67.7	64.6
— Feb.	72.0	72.8	68.4	64.1	67.3	53.0	57.3	47.0	44.1	62.2	57.6
— Mar.	67.8	68.8	63.2	58.8	63.2	53.0	51.6	46.1	45.7	55.0	55.3
— Apr.	64.5	65.1	61.7	58.8	61.7	50.6	48.7	45.3	43.3	54.8	53.5
— May	64.4	62.1	61.7	56.3	62.0	54.6	50.6	48.6	50.3	57.4	56.2
— June	64.4	61.6	60.3	56.6	62.9	57.8	48.5	40.1	48.5	54.8	56.5
— July	64.4	60.8	60.3	57.0	62.8	57.8	54.4	52.7	52.7	55.9	58.0
— Aug.	64.4	60.8	60.3	56.2	63.3	56.0	55.0	50.0	54.0	58.9	57.8
— Sept.	64.2	61.4	60.2	58.9	66.0	56.3	54.0	44.5	52.9	59.5	58.2
— Oct.	64.1	62.2	60.2	60.2	65.9	52.5	47.3	47.3	50.9	58.6	56.4
— Nov.	64.2	62.2	60.1	60.2	62.9	53.9	54.4	48.1	48.0	58.8	56.2
— Dec.	64.2	62.4	60.1	60.2	60.6	52.5	52.2	46.6	47.8	53.2	54.4

JULY 1992

SECTION VI
Table 4

REPRESENTATIVE WELLHEAD PRICES FOR CONVENTIONAL OIL AS OF DECEMBER 1991

Dollars Per Cubic Metre

ALBERTA

Acheson	124.42	Mitsue	127.16
Bantry	83.42	Nipisi	134.58
Bellshill	90.28	Pembina	128.26
Bigoray	126.94	Provost (Heavy)	94.63
Bonnie Glen	127.48	Rainbow	129.68
Brazeau River	130.54	Red Earth	130.53
Carson Creek North	130.00	Redwater	128.94
Clive	121.92	Snipe Lake	122.57
Drumheller	100.38	Spirit River	121.61
Evi	130.19	Sturgeon Lake South	129.28
Fenn Big Valley	102.82	Swan Hills (Bhl A & B)	130.78
Ferrier	124.78	Swan Hills (South)	130.17
Golden Spike	128.66	Sylvan Lake	127.06
Grand Forks	88.40	Taber	77.54
Harmattan Elkton	128.45	Twining	101.00
Innisfail	127.10	Utikuma Lake	125.01
Joarcam	128.51	Valhalla	120.08
Joffre	122.74	Virginia Hills	127.48
Judy Creek (Bhl A)	130.42	Wembley	124.27
Judy Creek (Bhl B)	131.06	Westerose	132.68
Kaybob	129.86	Willesden Green	126.80
Kaybob South	129.05	Wizard Lake	132.44
Leduc/Woodbend	126.98	Zama	125.17
Medicine River	115.08		

SASKATCHEWAN

Alameda	113.63	Pinto	113.69
Alida	111.45	Queensdale	114.08
Carnduff	111.33	Rosebank	104.73
Elmore	102.28	Star Valley	102.79
Glen Ewen	128.84	Steelman	103.10
Hastings	110.42	Weyburn	104.18
Ingoldsby	81.27	Willmar	114.71
Midale	87.93	Workman	107.70
Nottingham	118.78		

BRITISH COLUMBIA

Boundary Lake	104.16	Milligan Creek	119.07
Eagle West	123.27	Peejay	121.66
Inga (Inga A)	121.48		

MANITOBA

Daly	109.73	Waskada	113.68
Virden	111.91		

ONTARIO

Becher (f.o.b. Sarnia)	127.35	Oil Springs (f.o.b. Sarnia)	124.55
Gobles (f.o.b. Sarnia)	140.80	Rodney (f.o.b. Sarnia)	124.89

Note: The above are weighted average prices for December and exclude GST.

CANADIAN CONSUMPTION OF CRUDE OIL & PRODUCTS

Cubic Metres per Day

	*Refinery Crude Runs**	*Product Imports*	*Product Exports*	*Net Product Imports*	*Apparent Consumption of Crude Oil & Products***
1986	218 613	18 703	23 424	(4 721)	213 892
1987	229 649	22 245	26 993	(4 748)	224 901
1988	241 175	24 386	36 802	(12 416)	228 759
1989	246 070	28 077	33 949	(5 872)	240 198
1990	251 785	22 737	38 288	(15 551)	236 234
1991	238 154	23 443	42 131	(18 688)	219 466

* Includes condensate and pentanes plus and propane/butane/mixes

** Before inventory change.

Note: Export/Import numbers above do not reflect total foreign trade transactions.

JUNE 1992

SALES OF NATURAL GAS IN CANADA

Million Cubic Metres per Day

	Residential	*Commercial*	*Industrial*	*Direct*	*Total*
1986	33.4	28.4	69.9	2.1	133.8
1987	31.4	26.7	67.9	5.0	131.0
1988	34.9	29.3	69.7	10.0	143.9
1989	38.0	31.5	74.8	11.5	155.8
1990	37.0	30.7	70.6	10.9	149.2
1991	37.4	30.8	68.4	13.1	149.7

NATURAL GAS SALES IN CANADA BY PROVINCE

Million Cubic Metres at 101.325 kPa and 15°C

	New Brunswick	*Quebec*	*Ontario*	*Manitoba*	*Saskatchewan*	*Alberta*	*British Columbia*	*Canada*
1960	2	345	2 942	327	862	3 876	731	9 085
1961	2	686	3 545	467	1 004	3 988	810	10 502
1962	2	655	4 223	525	1 077	4 275	915	11 673
1963	2	769	4 748	643	1 186	4 439	1 005	12 793
1964	2	940	5 503	787	1 298	4 556	1 207	14 291
1965	2	885	6 209	935	1 620	4 936	1 646	16 232
1966	2	921	6 801	1 066	1 842	5 236	2 135	18 003
1967	2	1 000	7 909	1 182	1 942	5 530	2 127	19 691
1968	2	1 251	8 728	1 282	2 295	5 692	2 450	21 699
1969	2	1 439	9 956	1 343	2 233	6 425	2 531	23 929
1970	2	1 436	11 501	1 460	2 257	6 592	2 742	25 989
1971	2	1 569	13 018	1 555	2 326	7 037	2 859	28 365
1972	2	1 649	15 654	1 697	2 493	7 615	3 348	32 458
1973	1	1 8.9	16 405	1 767	2 632	7 962	4 240	34 826
1974	2	2 272	18 447	1 810	2 623	8 425	3 652	37 231
1975	2	2 334	18 059	1 708	2 609	8 712	4 102	37 526
1976	2	2 277	19 178	1 725	2 671	9 079	3 903	38 835
1977	2	2 309	18 823	1 719	2 884	11 000	3 810	40 547
1978	2	2 460	18 674	1 818	2 791	12 062	3 938	41 745
1979	2	2 765	18 915	1 928	2 830	12 868	4 186	43 494
1980	2	2 921	18 641	1 783	2 762	12 819	4 327	43 255
1981	2	3 191	18 489	1 697	2 618	12 767	4 121	42 885
1982	2	2 970	17 800	1 817	2 786	14 061	4 453	43 888
1983	2	3 589	17 778	1 721	2 623	13 178	4 402	43 833
1984	1	4 206	18 991	1 776	2 798	15 066	4 720	47 558
1985	1	4 872	19 599	1 852	2 838	15 964	4 996	50 122
1986	1	4 939	19 245	1 769	2 553	15 030	4 515	48 053
1987	1	5 008	19 478	1 551	2 381	14 516	4 855	47 791
1988	—	5 195	21 149	1 827	2 793	16 288	5 429	52 681
1989	—	5 372	22 398	1 879	2 761	17 795	6 663	56 868
1990	—	5 588	20 689	1 948	2 792	17 420	6 034	54 471
1991	—	5 452	21 064	1 847	3 146	17 146	6 016	54 671

* NOTE: Direct sales not included prior to 1987.

CANADIAN DEMAND FOR MOTOR GASOLINE, DIESEL & HEAVY FUEL OIL

Cubic Metres Per Day

	1985	1986	1987	1988	1989	1990	1991
MOTOR GASOLINE:							
Atlantic	7 458	7 417	7 594	7 899	7 845	7 946	7 589
Quebec	18 447	18 703	18 803	19 447	20 303	19 857	18 845
Ontario	32 429	32 888	33 547	34 660	35 536	34 271	33 762
Manitoba	4 017	3 966	3 937	3 846	3 836	3 715	3 827
Alberta	12 084	11 848	12 120	12 603	12 642	12 611	11 515
British Columbia	9 861	9 863	9 684	9 855	10 205	9 773	9 938
Yukon	271	268	166	161	150	152	153
Saskatchewan/NWT*	5 105	5 116	5 175	4 804	4 827	4 670	4 602
Canada	89 673	90 069	91 025	93 274	95 344	92 995	90 231
DIESEL FUEL:							
Atlantic	4 077	3 995	4 270	4 576	4 711	4 874	4 933
Quebec	6 566	6 886	7 363	8 189	8 760	8 136	7 751
Ontario	10 580	10 835	11 462	12 203	12 292	11 999	11 047
Manitoba	2 306	2 275	2 413	2 403	2 370	2 455	2 154
Alberta	7 795	7 397	7 483	7 346	7 698	7 672	7 086
British Columbia	6 166	5 797	6 480	7 039	7 239	7 024	7 011
Yukon	751	609	153	187	207	231	195
Saskatchewan/NWT*	3 246	3 162	3 559	3 599	3 785	3 708	3 629
Canada	41 487	40 956	43 183	45 542	47 062	46 099	43 806
HEAVY FUEL OIL:							
Atlantic	6 112	6 488	8 414	9 503	12 032	10 451	9 678
Quebec	5 386	5 142	4 444	5 953	7 594	7 345	5 889
Ontario	2 314	3 186	3 341	3 846	4 146	5 026	2 992
Manitoba	219	200	180	176	168	177	201
Alberta	68	105	92	94	104	196	165
British Columbia	1 822	2 051	2 227	2 518	2 797	3 108	3 041
Yukon	59	60	—	—	—	—	—
Saskatchewan/NWT*	96	90	136	109	107	134	97
Canada	16 077	17 322	18 834	22 199	26 948	26 437	22 063

Note: May not total due to rounding.

Effective 1987 NWT included with Saskatchewan.

JUNE 1992

SECTION VII
Table 7A

REFINERY RUN TO STILLS* — CANADA

Cubic Metres per Day

	Atlantic Provinces	Quebec	Ontario	Manitoba	Sask.	Alberta & N.W.T.	B.C. & Yukon	Alberta	B.C.	Territories	Canada
1986	29 510	39 565	73 690	—	5 972	—	—	48 416	21 016	444	218 613
1987	34 242	40 366	75 063	—	6 887**	—	—	50 992	22 099	**	229 649
1988	45 376	41 359	75 056	—	5 316**	—	—	52 982	21 086	**	241 175
1989	45 468	41 339	79 714	—	5 966**	—	—	55 762	17 821	**	246 070
1990	47 491	46 593	76 275	—	7 373**	—	—	55 612	18 441	**	251 785
1991	44 896	43 634	70 870	—	7 420**	—	—	51 922	19 412	**	238 154

* Includes condensate and pentanes plus propane/butanes mixes.

** Effective 1987, Saskatchewan & Territories are combined.

JUNE 1992

REFINERY RECEIPTS* — CANADA

Cubic Metres per Day

	Received From															
	Middle East															
	Iran	*Iraq*	*Kuwait*	*U.A.E.*	*Saudi Arabia*	*Libya*	*Nigeria*	*Venezuela*	*Norway*	*U.K.*	*U.S. & Mexico*****	*Mexico*	*Other***	*TOTAL IMPORTED*	*CANADA*	*TOTAL*
1986	4 817	—	—	—	3 914	—	6 442	6 494	2 847	24 016	3 783***	2 887	1 176	56 376	157 985	214 361
1987	3 641	1 599	—	793	2 375	—	6 427	5 637	2 098	32 359	2 627	2 771	3 982	64 309	159 891	224 200
1988	1 733	236	—	1 672	5 214	—	6 643	4 679	3 842	40 177	2 172	1 686	3 076	71 130	163 767	234 897
1989	2 762	2 130	—	—	6 052	—	9 715	5 208	11 675	31 684	4 150	1 791	2 221	77 388	163 135	240 523
1990	—	1 723	—	528	9 914	—	7 807	4 590	18 822	33 505	2 829	1 973	3 548	85 239	161 760	246 999
1991	256	—	—	478	11 571	—	8 349	5 689	23 912	30 345	651	2 379	2 842	86 417	145 750	232 167

* Includes crude oil, condensate and pentanes plus.

** Includes Middle East imports not elsewhere specified and others.

*** Includes exchanges with the United States.

**** Includes receipts from Mexico prior to 1978.

JUNE 1992

REFINERY CRUDE OIL CAPACITY — CANADA

Province	1990 No.	1990 m³/CD	1991 No.	1991 m³/CD
Newfoundland	1	17 490	1	17 490
Nova Scotia	2	16 280	2	16 280
New Brunswick	1	39 730	1	39 730
Quebec	3	52 078	3	52 078
Ontario**	6	80 288	6	80 098
Manitoba	—	—	—	—
Saskatchewan	2	9 725	2	9 725
Alberta	6	63 220	6	63 237
— Oil Sands Upgrader*	2	43 980	2	43 980
British Columbia	6	25 766	5	23 324
Northwest Territories	1	600	1	600
CANADA	30	349 157	29	346 542

* Represents oil sands facilities. Capacity is bitumen.
** Excludes crude distillation capacity associated with the Polysar Corunna petrochemical complex.

1991 PETROLEUM REFINERIES IN CANADA

Company	Refinery Location	First Operation	Crude Source	CAPACITIES m³/CD Crude	Vacuum Distillation	Thermal Operations	Cat Cracking	Cat Reforming	Cat Hydro-Cracking	Cat Hydro-Refining	Cat Hydro-Treating	Alkylation	Isom	Lubes	Asphalt	Coke	t/D Sulphur
NEWFOUNDLAND																	
Newfoundland Processing Ltd.	Come-by-Chance	1973	North Sea W. Africa Mid East	17 490	7 950	2 860	—	4 130	5 724	4 130a 2 860b	—	—	—	—	—	—	200
NOVA SCOTIA																	
Imperial Oil Ltd.	Dartmouth	1918	W. Canada Venezuela Mid-East North Sea	13 100	6 360	—	3 970	1 400	—	—	1 400c 5 500b	—	—	—	790	—	68
Ultramar Canada Inc.	Halifax	1963	Venezuela Mid-East W. Canada Mexico North Sea	3 180	1 367	—	1 145	572	—	—	572a 827b	—	—	—	—	—	—
NEW BRUNSWICK																	
Irving Oil Ltd.	Saint John	1960	Mid-East W. Canada North Sea Venezuela Africa	39 730	10 334	3 180	3 021	6 120	5 247	7 790	8 020a	954	302 1 590c	—	2 067	—	203
QUEBEC																	
Ultramar Canada Inc.	St. Romuald	1971	Venezuela Mexico Saudi Arabia North Sea	19 080	8 745	—	6 520	2 970	—	—	3 810a 2 300b	—	1 670	—	6 200	—	38
Petro-Canada Products Inc.	Montreal	1955	Mid-East Venezuela W. Canada Mexico	13 900	6 470	—	2 730	4 980	2 290	—	4 230a 1 430b	370	1 396	—	2 270	—	—
Shell Canada Ltd.	Montreal	1933	Venezuela W. Canada Mexico Mid-East North Sea	19 078	7 854	1 908	3 498	3 291	1 860	—	9 730	397	1 081	486	1 145	—	—
ONTARIO* **																	
Petro-Canada Products Inc.	Oakville	1958	W. Canada	12 800	6 520	—	4 040	2 100	—	—	3 100a 1 000b	490	—	—	1 510	—	41
Petro-Canada Products Inc.	Mississauga	1943	W. Canada	6 600	5 640	—	—	1 560	—	—	1 640a 940b	—	1 160	780	730	—	41
Imperial Oil Ltd.	Sarnia	1897	W. Canada	19 310	4 530	3 300	3 700	2 300 2 100	1 700	—	5 100a 2 100b 3 900b	1 100	—	1 000	—	—	132
Imperial Oil Ltd.	Nanticoke	1978	W. Canada	16 900	4 800	—	6 000	3 900	—	—	4 100a	1 100	—	—	—	—	33

LEGEND: a = Pretreating reformer feeds; b = Distillate; c = Naphtha; d = Misc. *Synthetic Crude Oil **Coker Charge

*** Excludes crude distillation capacity associated with the Polysar Corunna petrochemical complex.

JULY 1992

1991 PETROLEUM REFINERIES IN CANADA

Company	Refinery Location	First Operation	Crude Source	CAPACITIES m³/CD Crude	Vacuum Distillation	Thermal Operations	Cat Cracking	Cat Reforming	Cat Hydro-Cracking	Cat Hydro-Refining	Cat Hydro-Treating	Alkylation	Isom	Lubes	Asphalt	Coke	t/D Sulphur
ONTARIO CONT.																	
Shell Canada Ltd.	Corunna	1952	W. Canada	11 288	3 927	644	2 289	3 339	1 073	—	3 386	—	429	—	—	—	30
Sunoco Inc.	Sarnia	1953	W. Canada	13 200	2 700	830	2 500	4 130	3 200	—	4 000a 860b	750	—	—	—	—	49
SASKATCHEWAN																	
Consumers' Co-op Refineries	Regina	1935	W. Canada	7 185	3 595	1 150··	2 800	1 435	1 725	4 310···	1 700a 1 000b 430c	—	429	—	—	320	245
				(Polymerization 700)													
Moose Jaw Asphalt Inc.	Moose Jaw	1934	W. Canada	2 540	1 400	—	—	—	—	—	—	—	—	—	1 200	—	—
ALBERTA																	
Suncor Oil Sands Group	Ft. McMurray	1966	W. Canada	12 500··	—	9 700·	—	—	—	—	11 111b	—	—	—	—	3 000	370
Syncrude Canada Limited	Ft. McMurray	1978	W. Canada	31 480··	—	26 600·	—	—	4 900	—	8 900c 21 000b	—	—	—	—	3 880	900
Petro-Canada Products Inc.	Edmonton	1971	W. Canada	18 360	4 290	1 130	5 290	1 430	2 890	—	7 410ab 1 160b	1 510	1 920	—	—	438	56
Husky Oil Operations Ltd.	Lloydminster	1947	W. Canada	3 705	2 225	—	—	Other units shut down 1971-07-01						—	1 845	—	—
Imperial Oil Ltd.	Strathcona	1975	W. Canada	26 200	10 500	—	7 500	3 300	—	—	8 100c	1 900	1 100	500	900	—	19
Parkland Industries Ltd.	Bowden	1960	W. Canada	900	—	—	—	410	—	—	410a	—	400(1)	—	—	—	—
Shell Canada Ltd.	Scotford	1984	W. Canada	9 507	—	—	—	3 418	6 439	—	6 757 3 418c	—	—	—	—	—	—
Turbo Resources Ltd.	Balzac	1982	W. Canada	4 565	1 224	—	1 480	1 141	—	—	1 569a 1 113b	—	52	—	—	—	—
BRITISH COLUMBIA																	
Chevron Canada Ltd.	N. Burnaby	1936	W. Canada	7 154	1 590	—	2 385	1 590	—	—	1 590c	397	—	—	220	—	10
Petro-Canada Products Inc.	Port Moody	1958	W. Canada	4 050	—	—	—	1 370	—	—	2 450a 2 240b	—	—	—	—	—	3
Imperial Oil Ltd.	Ioco	1915	W. Canada	6 800	3 300	—	2 000	1 100	—	—	900b 1 100a 900b	—	—	—	100	—	18
Shell Canada Ltd.	N. Burnaby	1932	W. Canada	3 820	1 110	—	970	570	—	—	1 572b 860c	—	—	—	360	—	11
Husky Oil Operations Ltd.	Prince George	1967	W. Canada	1 500	570	—	480	210	—	—	1 050abc	—	100	—	190	—	—
NORTHWEST TERRITORIES																	
Imperial Oil Ltd.	Norman Wells	1921	Norman Wells	600	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND: a = Pretreating reformer feeds; b = Distillate; c = Naphtha; d = Misc. *Synthetic Crude Oil **Coker Charge ***Atmospheric Residual Desulphurization
(1) Total Naphtha Hydrotreating (810) includes 400 for Isom FD.
JUNE 1992

REFINERY CLOSURES - CANADA

Year of Closure	Company	Location	First year of Operation	Crude Oil Capacity M³/D
1970	Husky Oil Ltd.	Moose Jaw, Saskatchewan	1954	560
1971	Gulf Oil Canada Ltd.	Saskatoon, Saskatchewan	1933	1 180
	Gulf Oil Canada Ltd.	Edmonton, Alberta	1951	2 000
1975	Imperial Oil	Edmonton, Alberta	1948	6 000
	Imperial Oil	Winnipeg, Manitoba	1951	3 400
	Imperial Oil	Regina, Saskatchewan	1916	4 880
	Imperial Oil	Calgary, Alberta	1923	3 370
1976	Petro-Canda Products Inc.*	Come-By-Chance, Newfoundland	1973	15 900
	Northern Petro. Div. Canadian Propane Gas & Oil (Sask. Ltd.)	Kamsack, Saskatchewan	1936	1 670
1978	Texaco Canada Inc.	Port Credit, Ontario	1938	1 200
1980	Gulf Canada Ltd.	Point Tupper, Nova Scotia	1971	2 050
1982	Texaco Canada Inc.	Montreal, Quebec	1927	11 840
1983	Petro-Canda Products Inc.	Montreal, Quebec	1960	11 280
	Gulf Canada Ltd.	Calgary, Alberta	1939	2 050
	Gulf Canada Ltd.	Kamloops, British Columbia	1954	1 510
	Imperial Oil Ltd.	Montreal, Quebec	1916	13 200
	Shell Canada Ltd.	St. Boniface, Manitoba	1927	4 770
	Shell Canada Ltd.	Oakville, Ontario	1963	7 000
	Ultramar Canada Inc.	Holyrood, Newfoundland	1961	2 220
1984	Texaco Canada Inc.	Edmonton, Alberta	1951	4 451
1986	Gulf Canada Ltd. **	Montreal, Quebec	1931	11 770
1991	Petro-Canada Products	Taylor, British Columbia	1960	2 460
1992	Turbo Resources Pay Less Holdings	Balzac, Alberta	1982	4 565
1992/93	Petro-Canada	Port Moody, British Columbia	1958	4 050
1992/93	Petro-Canada	Mississauga, Ontario	1943	6 600
1993	Shell Canada Ltd.	N. Burnaby, British Columbia	1932	3 820

* Re-opened in 1987 as Newfoundland Processing Ltd.
** Re-opened as Kemtec Inc. with no crude capacity.

REFINERY UTILIZATION RATE — CANADA

Percent

1947	80
1948	77
1949	79
1950	84
1951	86
1952	85
1953	85
1954	85
1955	86
1956	88
1957	86
1958	78
1959	84
1960	81
1961	85
1962	82
1963	89
1964	88
1965	89
1966	91
1967	86
1968	93
1969	92
1970	95
1971	83
1972	89
1973	91
1974	88
1975	82
1976	77
1977	75
1978	75
1979	83
1980	84
1981	79
1982	70
1983	77
1984	79
1985	76
1986	77
1987	80
1988	83
1989	86
1990	85
1991	80

YIELDS OF REFINED PETROLEUM PRODUCTS IN CANADA
PERCENT

	1952	1955	1960	1965	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Motor Gasoline	42.0	39.6	36.2	36.1	36.0	35.6	35.8	35.1	32.8	33.0	32.9	32.9	35.4	35.7	34.3
Heavy Fuel Oil (Nos. 4 - 6)	19.9	20.1	16.5	17.1	17.3	17.8	17.9	18.2	20.5	22.0	21.4	21.5	20.2	18.6	19.1
Light Fuel Oil (Nos. 2 & 3)	11.1	16.6	19.9	19.9	15.8	15.9	15.8	15.6	15.5	14.9	15.0	14.4	13.4	13.5	13.2
Diesel Fuel Oil	7.1	6.8	8.4	8.6	11.4	11.6	11.5	11.8	11.9	11.5	11.4	11.2	11.6	12.2	12.6
Petro-Chem Feedstock	0.6	1.0	2.2	2.8	1.9	1.7	1.9	2.1	2.1	2.4	2.0	1.6	1.4	2.1	3.6
Aviation Fuel (1)	1.1	1.7	2.1	2.3	2.7	2.7	2.9	3.3	3.4	3.4	3.7	3.9	4.2	4.3	4.1
Others	18.2	14.2	14.7	13.2	14.9	14.7	14.2	13.9	13.8	12.8	13.6	14.5	13.8	13.6	13.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Motor Gasoline	34.8	35.0	36.1	37.4	39.5	39.3	40.9	37.3	37.1	36.6	36.5	35.4	35.1	35.5
Heavy Fuel Oil (Nos. 4 - 6)	18.2	17.6	16.4	15.7	13.6	11.1	10.7	8.1	7.7	7.7	8.3	8.4	8.5	8.1
Light Fuel Oil (Nos. 2 & 3)	12.4	14.6	14.5	12.6	12.1	10.5	10.3	8.3	9.5	8.5	7.6	7.7	7.6	7.9
Diesel Fuel Oil	12.9	13.2	13.6	14.1	14.6	16.1	18.8	17.4	16.6	17.3	18.5	18.2	18.5	18.1
Petro-Chem Feedstock	4.7	4.7	4.6	5.0	5.3	5.1	4.9	5.1	6.0	4.5	4.3	4.5	5.1	5.4
Aviation Fuel (1)	4.5	4.5	4.6	4.7	4.8	4.8	4.9	5.3	5.6	5.9	5.5	5.6	5.5	4.9
Others	12.5	10.4	10.2	10.5	10.1	13.1	9.5	18.5	17.5	19.5	19.3	20.2	19.7	20.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Includes aviation gasoline and turbo fuel - kero & naphtha type.

GAS PIPELINES IN CANADA AT YEAR-END 1990

Kilometres

	Outside diameter of Pipe — Millimetres						
	0-75	76-150	151-226	227-328	329-531	532 and Larger	Total
GATHERING LINES(1)							
New Brunswick	—	—	—	—	—	—	—
Quebec	—	—	—	—	—	—	—
Ontario	—	135	71	41	55	31	333
Manitoba	—	—	—	—	—	—	—
Saskatchewan	19	175	120	67	28	9	418
Alberta	408	1 442	732	265	100	83	3 030
British Columbia	—	44	306	631	495	736	2 212
Territories	—	—	—	—	—	51	51
	427	1 796	1 229	1 004	678	910	6 044
TRANSMISSION							
New Brunswick	—	—	—	—	—	—	—
Quebec	—	1	151	109	537	325	1 123
Ontario	361	940	1 775	1 954	873	5 977	11 880
Manitoba	318	528	149	168	20	2 098	3 281
Saskatchewan	3 389	3 109	1 836	1 844	1 378	3 225	14 781
Alberta	1 926	3 754	5 794	5 176	4 880	5 299	26 829
British Columbia	309	696	704	1 004	235	3 380	6 328
	6 303	9 028	10 409	10 255	7 923	20 304	64 222
DISTRIBUTION							
New Brunswick	—	—	—	—	—	—	—
Quebec	2 359	1 852	1 313	330	265	25	6 144
Ontario	28 209	10 698	3 152	1 137	236	147	43 579
Manitoba	3 022	595	245	38	48	—	3 948
Saskatchewan	49 765	4 946	466	75	29	—	55 281
Alberta (2)	39 017	3 651	1 270	282	126	—	44 346
British Columbia	12 112	2 650	462	188	89	15	15 516
	134 484	24 392	6 908	2 050	793	187	168 814
ALL LINES							
New Brunswick	—	—	—	—	—	—	—
Quebec	2 359	1 853	1 464	439	802	350	7 267
Ontario	28 570	11 773	4 998	3 132	1 164	6 155	55 792
Manitoba	3 340	1 123	394	206	68	2 098	7 229
Saskatchewan	53 173	8 230	2 422	1 986	1 435	3 234	70 480
Alberta (2)	41 351	8 847	7 796	5 723	5 106	5 382	74 205
British Columbia	12 421	3 390	1 472	1 823	819	4 131	24 056
Territories	—	—	—	—	—	51	51
	141 214	35 216	18 546	13 309	9 394	21 401	239 080

(1) Exclude producers' gathering line.

(2) Excludes Alberta co-operatives.

APRIL 1992

GAS PIPELINES IN CANADA AT YEAR-END

Kilometres

	1985	1986	1987	1988	1989	1990
GATHERING (1)						
New Brunswick	21	21	21	—	—	—
Quebec	—	—	—	—	—	—
Ontario	2 205	2 244	2 170	984	945	333
Manitoba	—	—	—	—	—	—
Saskatchewan	2 701	1 783	2 001	540	398	418
Alberta	22 339	23 902	27 926	3 452	2 929	3 030
British Columbia	3 367	3 405	3 521	2 096	2 182	2 212
Territories	55	91	97	51	51	51
	31 688	31 446	35 736	7 123	6 505	6 044
TRANSMISSION						
New Brunswick	22	22	22	—	—	—
Quebec	1 145	1 101	1 105	1 117	1 123	1 123
Ontario	10 925	11 053	11 073	11 210	11 440	11 880
Manitoba	2 989	2 995	2 930	2 996	3 075	3 281
Saskatchewan	12 941	13 056	13 181	13 181	14 364	14 781
Alberta	22 519	23 280	23 740	24 519	25 238	26 829
British Columbia	5 800	5 961	6 097	6 266	6 313	6 328
	56 341	57 469	58 208	59 289	61 553	64 222
DISTRIBUTION						
New Brunswick	146	146	146	—	—	—
Quebec	4 669	5 715	5 656	5 936	6 074	6 144
Ontario	37 698	38 999	41 224	41 581	41 972	43 579
Manitoba	4 338	4 427	4 496	4 559	3 847	3 948
Saskatchewan	27 598	38 413	44 732	44 732	47 867	55 281
Alberta (2)	37 412	40 196	40 681	41 342	43 288	44 346
British Columbia	13 533	14 316	15 299	14 409	15 406	15 516
	125 394	142 212	152 234	152 559	158 454	168 814
ALL LINES						
New Brunswick	189	189	189	—	—	—
Quebec	5 814	6 817	6 761	7 053	7 197	7 267
Ontario	50 828	52 295	54 467	53 775	54 357	55 792
Manitoba	7 327	7 422	7 486	7 555	6 922	7 229
Saskatchewan	43 240	53 255	59 914	58 453	62 629	70 480
Alberta (2)	83 270	87 378	92 347	69 313	71 455	74 205
British Columbia	22 700	23 681	24 917	22 771	23 901	24 056
Territories	55	91	97	51	51	51
	213 423	231 128	246 178	218 971	226 512	239 080

Note: Excluding Manufactured & L.P. Gas Lines.

(1) Excludes gathering lines of the upstream producing industry.

(2) Excludes Alberta co-operatives.

APRIL 1992

OIL PIPELINES IN CANADA AT YEAR-END 1990

Kilometres

	Diameter of Pipe — Milimeters				
	0-150	151-328	329-480	481 and Larger	Total
GATHERING LINES (1)					
Northwest Territories	—	—	—	—	0
British Columbia	178	315	—	—	493
Alberta	3 374	3 207	85	20	6 686
Saskatchewan	1 684	1 179	32	2	2 897
Manitoba	160	—	—	—	231
Ontario	72	—	—	—	72
	5 468	4 772	117	22	10 379
TRUNK LINES					
Northwest Territories	—	752	—	—	752
British Columbia	—	810	—	835	1 645
Alberta	180	5 354	1 150	2 900	9 584
Saskatchewan	265	802	651	2 234	3 952
Manitoba	—	331	428	1 020	1 779
Ontario	—	107	46	1 337	1 490
Quebec	—	4	116	227	347
	445	8 160	2 391	8 553	19 549
PRODUCT LINES					
Yukon	89	—	—	—	89
British Columbia	56	—	—	—	56
Alberta	207	705	193	13	1 118
Saskatchewan	6	1 357	—	—	1 363
Manitoba	—	312	—	—	312
Ontario	24	1 837	76	22	1 959
Quebec	—	228	26	—	254
	382	4 439	295	35	5 151
ALL LINES					
Northwest Territories	—	752	—	—	752
Yukon	89	—	—	—	89
British Columbia	234	1 125	—	835	2 194
Alberta	3 761	9 266	1 428	2 933	17 388
Saskatchewan	1 955	3 339	683	2 236	8 212
Manitoba	160	714	428	1 020	2 322
Ontario	96	1 944	122	1 359	3 521
Quebec	—	232	142	227	601
	6 295	17 371	2 803	8 610	35 079

NOTE: Totals may not add due to rounding.
(1) Exclude producers' gathering line.

APRIL 1992

OIL PIPELINES IN CANADA AT YEAR-END

Kilometres

	1983	1984	1985	1986	1987	1988	1989	1990
GATHERING LINES (1)								
Northwest Territories	—	—	—	60	70	—	—	—
British Columbia	717	755	783	733	814	479	493	493
Alberta	9 614	10 911	14 147	14 340	15 764	5 463	6 572	6 686
Saskatchewan	3 195	3 637	3 428	3 832	5 718	2 893	2 921	2 897
Manitoba	280	233	404	405	702	231	231	231
Ontario	73	73	73	77	77	72	72	72
	13 879	15 609	18 835(1)	19 447(2)	23 146(3)	9 138(4)	10 289(4)	10 379(4)
TRUNK LINES								
Northwest Territories	—	—	752	752	752	752	752	752
British Columbia	1 646	1 643	1 645	1 645	1 645	1 645	1 650	1 645
Alberta	8 927	10 182	9 526	9 642	9 952	9 540	9 496	9 584
Saskatchewan	3 569	3 738	3 292	3 675	3 974	3 952	3 917	3 952
Manitoba	1 387	1 387	1 441	1 477	1 741	1 775	1 776	1 779
Ontario	1 475	1 489	1 489	1 489	1 489	1 475	1 490	1 490
Quebec	451	338	345	345	345	344	347	347
	17 455	18 777	18 489	19 024	19 896	19 483	19 428	19 549
PRODUCT LINES								
Yukon	89	89	89	89	89	89	89	89
British Columbia	56	56	56	56	56	56	56	56
Alberta	853	854	854	853	853	1 118	1 118	1 118
Saskatchewan	1 365	1 357	1 357	1 375	1 363	1 363	1 363	1 363
Manitoba	312	312	312	312	312	312	312	312
Ontario	2 095	2 095	2 031	2 031	1 898	1 917	1 959	1 959
Quebec	250	250	250	250	250	254	254	254
	5 020	5 013	4 949	4 964	4 820	5 109	5 151	5 151
ALL LINES								
Northwest Territories	—	—	752	812	822	752	752	752
Yukon	89	89	89	89	89	89	89	89
British Columbia	2 420	2 455	2 484	2 433	2 514	2 180	2 199	2 194
Alberta	19 395	21 946	24 526	24 835	26 569	16 121	17 186	17 388
Saskatchewan	8 130	8 732	8 078	8 881	11 055	8 208	8 201	8 212
Manitoba	1 979	1 932	2 157	2 194	2 755	2 318	2 319	2 322
Ontario	3 643	3 657	3 593	3 597	3 464	3 464	3 521	3 521
Quebec	701	588	594	594	594	598	601	601
	36 357	39 399	42 273	43 436	47 862	33 730	34 868	35 079

NOTE: Totals may not add due to rounding.

(1) Includes 10 206.1 kilometres of producers' gathering lines.

(2) Includes 10 588.7 kilometres of producers' gathering lines.

(3) Includes 14 084.8 kilometres of producers' gathering lines.

(4) Excludes producers' gathering lines.

APRIL 1992

CANADIAN PETROLEUM ASSOCIATION STATISTICAL HANDBOOK

SECTION XI. IMPORTS/EXPORTS

TABLE 1	Exports From Canada - Crude Oil & Equivalent and Natural Gas
TABLE 3	Canadian Exports of Energy Materials
TABLE 3A	Canadian Exports of Energy Materials
TABLE 3B	Canadian Exports of Energy Materials
TABLE 4	Canadian Imports of Energy Materials
TABLE 4A	Canadian Imports of Energy Materials
TABLE 4B	Canadian Imports of Energy Materials
TABLE 5	Subsisting National Energy Board Licences and Orders to Export Natural Gas
TABLE 5A	Subsisting National Energy Board Licences and Orders to Export Natural Gas
TABLE 5B	Subsisting National Energy Board Licences and Orders to Export Natural Gas
TABLE 5C	Subsisting National Energy Board Licences and Orders to Export Natural Gas
TABLE 5D	Subsisting National Energy Board Licences and Orders to Export Natural Gas
TABLE 5E	Subsisting National Energy Board Licences and Orders to Export Natural Gas
TABLE 5F	Subsisting National Energy Board Licences and Orders to Import Natural Gas
NOTE:	Import of Crude Oil by country of origin can be found in Section VIII - Table 2

EXPORTS FROM CANADA

	CRUDE OIL & EQUIVALENT Thousand Cubic Metres		*NATURAL GAS* Million Cubic Metres at 101.325 kPa and 15°C	
	Total	*Daily Average*	*Total*	*Daily Average*
1952	226	1	225	1
1953	398	1	266	1
1954	373	1	198	1
1955	2 357	6	319	1
1956	6 818	19	304	1
1957	8 847	24	446	1
1958	5 034	14	2 464	7
1959	5 302	15	2 401	6
1960	6 712	18	2 579	7
1961	10 194	28	4 764	13
1962	14 553	40	9 053	25
1963	14 441	40	9 658	26
1964	16 091	44	11 448	31
1965	17 164	47	11 442	31
1966	19 656	54	12 074	33
1967	23 891	65	14 310	39
1968	26 616	73	16 944	46
1969	31 359	86	18 974	51
1970	38 280	105	21 759	60
1971	43 057	118	25 581	70
1972	54 228	148	28 528	78
1973	66 752	183	29 204	80
1974	52 990	145	27 215	74
1975	41 707	114	26 896	74
1976	29 030	79	27 026	74
1977	19 211	53	28 152	77
1978	15 570*	43*	25 002	68
1979	16 727*	46*	27 906	76
1980	12 426*	34*	22 847	62
1981	9 505*	26*	21 578	59
1982	12 164*	33*	22 075	60
1983	16 778*	46*	20 023	55
1984	20 873*	57*	21 061	58
1985	27 547*	75*	25 347	69
1986	33 633	92	20 875	57
1987	35 776	98	27 672	76
1988	40 973	112	36 254	99
1989	37 458	103	37 870	104
1990	35 028	96	40 688	111
1991	43 074	118	44 844	123

*Includes exchanges with the United States.

CANADIAN EXPORTS OF ENERGY MATERIALS[1]

	1988	1989	1990	1991
Radioactive ores and concentrates:				
Million dollars	671.1	581.6	405.3	396.6
Coal:				
Million dollars	1 935.1	2 077.2	2 110.3	2 044.3
Million tonnes	29.5	31.8	32.0	32.4
Crude petroleum:				
Million dollars	4 010.3[2]	4 462.1[2]	5 528.5[2]	6 041.2[2]
Natural Gas:				
Million dollars	2 928.9[2]	3 022.7[2]	3 278.7[2]	3 339.0[2]
Petroleum and coal products:				
Million dollars	1 642.8	1 862.9	2 651.2	2 640.8
Butane and propane gas (liquefied):				
Million dollars	584.8	491.6	667.9	729.5
Million litres	6 972	6 216	6 016	7 073
Electricity:				
Million dollars	897.8	661.5	538.3	556.8
Million kilowatt hours	30 441	18 459	16 231	19 784
Total value:				
Million dollars	12 670.8	13 159.6	15 180.2	15 748.2

[1] All value are f.o.b. place of lading.
[2] See Table 1 for export volumes.

NOTE: Format revised as a result of the adoption of the Harmonized System by Statistics Canada.

MAY 1992

CANADIAN IMPORTS OF ENERGY MATERIALS [1]

	1988	1989	1990	1991
Radioactive ores and concentrates:				
Million dollars	73.8	107.3	108.6	62.3
Coal:				
Million dollars	729.7	686.7	611.4	472.4
Million tonnes	15.3	15.0	14.8	11.7
Crude Petroleum:				
Million dollars	2 823.7	3 607.5	5 300.2	4 488.7
Million cubic metres	23.5	28.3	31.8	30.8
Natural Gas:				
Million dollars	0.3	0.2	0.5	32.2
Million cubic metres	..	..	..	..
Crude bituminous substances, n.e.s.:				
Million dollars	2.1	2.4	49.8	55.8
Petroleum products:				
Million dollars	1 150.1	1 349.9	1 583.2	1 285.5
Coke:				
Million dollars	187.0	207.0	191.1	49.7
Thousand tonnes	2 458	2 085	1 922	483
Liquefied petroleum gases:				
Million dollars	85.0	73.5	121.7	107.8
Electricity:				
Million dollars	57.4	222.4	557.5	50.2
Million kilowatt hours	2 684	7 299	15 133	1 724
Total value:				
Million dollars	5 109.1	6 256.9	8 524.0	6 604.6

[1] All values are f.o.b. place of origin.

[2] Includes exchanges with the United States.

NOTE: Format revised as a result of the adoption of the Harmonized System by Statistics Canada.

MAY 1992

NATIONAL ENERGY BOARD LICENCES AND LONG-TERM ORDERS TO EXPORT NATURAL GAS — AS AT 1991-12-31

Exporter	Licence or Order Number	Point of Export	Term of Licence Or Order From	Term of Licence Or Order To	Maximum Export Volumes Term ($10^6 m^3$)
Alberta and Southern Gas Co. Ltd.	L-99	Kingsgate, B.C.	86-12-18 87-11-01	87-10-31 94-10-31	77 626.5
	GL-111	Kingsgate, B.C.	94-11-01	2005-10-31	116 385.0
Alberta Northeast Gas Ltd. and AEC Oil and Gas Company	GL-105	Iroquois, Ont.	88-11-01	2003-10-31	2 714.0
Alberta Northeast Gas Ltd. and ATCOR Ltd.	GL-104	Iroquois, Ont.	88-11-01	2003-10-31	5 428.0
Alberta Northeast Gas Ltd. and ProGas Limited	GL-103	Iroquois, Ont.	88-11-01	2003-10-31	10 236.0
Alberta Northeast Gas Ltd. and TransCanada PipeLines Limited	GL-102	Iroquois, Ont.	88-11-01	2003-10-31	42 646.0
		Niagara Falls, Ont.	88-11-01	2003-10-31	
Amoco Canada Petroleum Company Ltd.	GL-112	Huntingdon, B.C.	89-07-24 89-11-01	89-10-31 2004-10-31	3 856.0
Amoco Canada Resources Limited	GL-108	Emerson, Man.	89-03-16 89-11-01	89-10-31 2001-10-31	1 504.0
Amoco Canada Resources Limited and Consolidated Edison Company	GL-127	Niagara Falls, Ont.	90-07-27 90-11-01	90-10-31 2004-10-31	4 728.0 4 778.0
BC Gas Inc.	GL-123[a]	Huntingdon, B.C.	89-11-09	92-04-30	184.0
Canadian Hunter Marketing Ltd.	GL-107	Niagara Falls & Iroquois, Ont.	90-11-01	2010-10-31	3 381.0
Canadian-Montana Pipe Line Company	GL-25	Aden/Cardston, Alta., Emerson, Man. & Niagara Falls, Ont.	68-11-01 69-11-01 91-11-01	69-10-31 91-10-31 93-10-31	4 890.8
	GL-72	Aden, Alta.	88-01-01 88-11-01 90-11-01 91-11-01	88-10-31 90-10-31 91-10-31 92-10-31	1 085.7
	GO-3-79	Reagan Field, Alta.	79-05-01	93-12-31	105.0
Canadian Occidental Petroleum Ltd.	GL-150	Niagara Falls, Ont.	91-11-01	2006-10-31	2 373.0

NATIONAL ENERGY BOARD LICENCES AND LONG-TERM ORDERS TO EXPORT NATURAL GAS — AS AT 1991-12-31

Exporter	Licence or Order Number	Point of Export	Term of Licence Or Order From	Term of Licence Or Order To	Maximum Export Volumes Term ($10^6 m^3$)
Canstates Gas Marketing and Transco Energy Marketing Company	GL-137	Niagara Falls, Ont.	90-11-08 91-11-01 2000-11-01	91-10-31 2000-10-31 2002-10-31	5 593.8
Canterra Energy Ltd.	GL-113	Emerson, Man.	89-08-24 89-11-01	89-10-31 2003-10-31	2 099.1
	GL-114	Emerson, Man	89-08-24	89-10-31	2 246.4
Centra Gas Ontario Ltd.	GL-130[b]	Sprague, Man.	90-07-27	90-10-31	3 150.0
Centra Transmission Holdings Ltd.	GL-28	Sprague, Man.	70-11-01	95-10-31	229.0
	GL-29	Fort Frances, Ont.	70-11-01	95-10-31	5 462.2
	GL-30[b]	Sprague, Man.	70-11-01	95-10-31	8 498.1
Darmouth Power Associates Limited partnership	GL-164	Iroquois, Ont.	92-11-01	2007-10-31	2 196.0
Direct Energy Marketing Limited	GL-132	Philipsburg, Que.	90-07-27 90-11-01	90-10-31 2005-10-31	936.2
Encogen Four Partners	GL-152	Chippawa, Ont.	Date of 1st deliveries for 15-year term		2 326.6
Esso Resources Canada Ltd.	GL-151	Iroquois, Ont.	91-11-01	2006-10-31	5 432.0
Esso Resources Canada Ltd. and Transco Energy Marketing Company	GL-136	Niagara Falls, Ont.	90-11-08 91-11-01	91-10-31 2002-10-31	9 307.5
FSC Resources Ltd.	GL-138	Napreville, Que.	91-03-01 91-11-01	91-10-31 2005-10-31	8 376.8
	GL-153	Niagara Falls, Ont.	91-11-01	2006-10-31	2 480.2
Fulton Cogeneration Ass.	GL-154	Chippawa, Ont.	91-11-01 2001-11-01	2001-10-31 2005-10-31	1 424.0
Husky Oil Operations Ltd.	GL-144	Cornwall, Ont.	92-08-01	2007-11-01	3 154.0
Indeck Gas Supply Corporation	GL-133	Niagara Falls, Ont.	90-07-27 90-11-01	90-10-31 2005-10-31	3 500.0
	GL-155	Chippawa, Ont.	Date of 1st deliveries for 15-year term		2 439.0
	GL-156	Chippawa, Ont.	Date of 1st deliveries for 15-year term		852.0
Kamine / Besicorp Carthage L.P.	GL-158	Chippawa, Ont.	91-11-01	2006-10-31	2 093.7

NATIONAL ENERGY BOARD LICENCES AND LONG-TERM ORDERS TO EXPORT NATURAL GAS — AS AT 1991-12-31

Exporter	Licence or Order Number	Point of Export	Term of Licence Or Order From	Term of Licence Or Order To	Maximum Export Volumes Term (10^3m^3)
Kamine / Besicorp South Glens L.P.	GL-159	Emerson, Man.	91-11-01	2006-10-31	2 093.7
KannGaz Producers Ltd.	GL-77	Niagara Falls, Ont.	87-11-01 96-11-01 97-11-01 98-11-01	96-10-31 97-10-31 98-10-31 99-10-31	13 567.0
L&J Energy Systems Inc.	GL-148	Iroquois, Ont.	Date of 1st deliveries for 12-year term		1 455.6
Many Islands Natural Gas (Canada) Limited	GL-44[c]	Emerson, Man.	72-03-15	92-10-31	18 951.3
Mobil Oil Canada	GL-145	Huntingdon, B.C.	91-01-24	2000-10-31	1 195.5
	GL-146	Huntingdon, B.C.	91-01-24 92-11-01 95-11-01	92-10-31 95-10-31 2000-10-31	1 145.6
	GL-147	Huntingdon, B.C.	91-01-24 92-11-01	92-10-31 2003-10-31	1 842.9
New England Power Co.	GL-160	Iroquois, Ont.	91-11-01	2006-11-01	9 308.0
Niagara Gas Transmission Limited	GL-78	Cornwall, Ont.	87-11-01 90-11-01 91-11-01	90-10-31 91-10-31 92-10-31	1 099.7
Norcen Energy Resources Limited	GL-115	Emerson, Man.	89-08-24 89-11-01	89-10-31 2001-10-31	1 841.0
	GL-116	Emerson, Man.	90-05-03 90-11-01 94-11-01	90-10-31 94-10-31 2001-10-31	1 034.0
North Canadian Oils Limited	GL-142	Emerson, Man.	90-11-08 91-11-01	91-10-31 2000-10-31	1 068.8
	GL-143	Emerson, Man.	90-11-08 91-11-01	91-10-31 2000-10-31	1 068.8
Pan-Alberta Gas Ltd.	GL-95	Emerson, Man. & Niagara Falls, Ont. combined maximum	87-11-01 96-11-01 97-11-01 98-11-01	96-10-31 97-10-31 98-10-31 99-10-31	16 604.7
		Maximum permitted at Niagara Falls, Ont. as part of combined Emerson/Niagara Falls volumes	87-11-19 96-11-01 97-11-01 98-11-01	96-10-31 97-10-31 98-10-31 99-10-31	
	GL-97	Monchy, Sask.	84-12-20 85-11-01	85-10-31 2001-10-31	75 296.7
	GL-106	Kingsgate, B.C.	88-11-01	2012-10-31	59 719.2

NATIONAL ENERGY BOARD LICENCES AND LONG-TERM ORDERS TO EXPORT NATURAL GAS — AS AT 1991-12-31

Exporter	Licence or Order Number	Point of Export	Term of Licence Or Order From	Term of Licence Or Order To	Maximum Export Volumes Term (10^6m^3)
Pawtucket Power Associates Limited Partnership	GL-149	Iroquois, Ont.	91-11-01	2006-10-31	1 986.0
Poco Petroleums Ltd.	GL-117	Emerson, Man.	89-08-24 89-11-01	89-10-31 2000-10-31	2 843.5
	GL-118	Emerson, Man.	89-08-24 89-11-01	89-10-31 2000-10-31	2 715.3
ProGas Limited	GL-81	Emerson, Man.	87-11-01 90-11-01 91-05-01 91-11-01 96-11-01 97-11-01 98-11-01	90-10-31 91-04-30 91-10-31 96-10-31 97-10-31 98-10-31 99-10-31	15 026.7
	GL-98	Emerson, Man. & Monchy, Sask. combined maximum Maximum permitted at Monchy, Sask. as part of combined Emerson/ Monchy volumes	86-08-13 86-11-01 87-11-01 86-08-13 86-11-01 87-11-01	86-10-31 87-10-31 2000-10-31 86-10-31 87-10-31 2000-10-31	35 492.8 17 746.4
	GL-101	Niagara Falls, Ont.	89-05-01 89-11-01	89-10-31 2009-10-31	10 340.0
	GL-109	Niagara Falls & Iroquois, Ont.	91-05-01 91-11-01	91-10-31 2011-10-31	5 170.0
	GL-129	Niagara Falls, Ont.	90-07-27 90-11-01	90-10-31 2005-10-31	15 665.3
	GL-161	Iroquois, Ont.	Date of 1st deliveries for 18.5-year term		4 800.4
Ramarro Resources Inc.	GL-139	Niagara Falls, Ont.	90-11-08 91-11-01	91-10-31 2005-10-31	925.5
Selkirk Cogen Partners, L.P.	GL-157	Iroquois, Ont.	Date of 1st deliveries for 15.5-year term		3 685.9
Shell Canada Limited	GL-100	Highwater, Que.	87-11-01 98-11-01	98-10-31 99-03-31	5 900.0
		Niagara Falls, Ont.	87-11-01 98-11-01	98-10-31 99-03-31	
	GL-119	Emerson, Man.	89-08-24 89-11-01	89-10-31 2003-10-31	2 234.0

NATIONAL ENERGY BOARD LICENCES AND LONG-TERM ORDERS TO EXPORT NATURAL GAS — AS AT 1991-12-31

Exporter	Licence or Order Number	Point of Export	Term of Licence Or Order From	Term of Licence Or Order To	Maximum Export Volumes Term (10^6m^3)
Shell Canada Limited (Cont'd)	GL-120	Emerson, Man.	89-08-24 89-11-01	89-10-31 2004-10-31	2 250.0
	GL-134	Niagara Falls, Ont.	90-07-27 90-11-01 2010-11-01	90-10-31 2010-10-31 2011-08-31	2 755.0
TransCanada PipeLines Limited	GL-42[d]	Emerson, Man.	71-04-15 71-11-01	71-10-31 94-10-31	60 316.5
	GL-83	Niagara Falls, Ont.	84-11-01 86-11-01 2002-11-01	86-10-31 2002-10-31 2003-01-15	16 371.0
	GL-84	Niagara Falls, Ont.	87-11-01 88-11-01	88-10-31 97-10-31	2 378.0
	GL-86	Emerson, Man.	87-11-01 90-11-01 91-11-01 94-11-01 95-11-01 96-11-01 97-11-01 98-11-01	90-10-31 91-10-31 94-10-31 95-10-31 96-10-31 97-10-31 98-10-31 99-10-31	10 886.4
	GL-87	Emerson, Man.	87-11-01 90-11-01 91-11-01 94-11-01 95-11-01 96-11-01 97-11-01 98-11-01	90-10-31 91-10-31 94-10-31 95-10-31 96-10-31 97-10-31 98-10-31 99-10 31	10 886.4
	GL-89	Emerson, Man.	84-11-01 85-11-01 86-11-01 90-11-01 91-11-01	85-10-31 86-10-31 90-10-31 91-10-31 92-10-31	12 960.8
	GL-110	Niagara Falls & Iroquois, Ont.	91-05-01 91-11-01	91-10-31 2012-10-31	5 443.2
	GL-121	Emerson, Man.	89-08-24 89-11-01	89-10-31 2003-10-31	2 326.5
	GL-122	Emerson, Man.	89-08-24 89-11-01	89-10-31 2004-10-31	2 326.5
	GL-135	Gananoque, Ont.	90-07-27 90-11-01	90-10-31 2005-10-31	7 910.0

NATIONAL ENERGY BOARD LICENCES AND LONG-TERM ORDERS TO EXPORT NATURAL GAS — AS AT 1991-12-31

Exporter	Licence or Order Number	Point of Export	Term of Licence Or Order From	Term of Licence Or Order To	Maximum Export Volumes Term (10^6m^3)
Unigas Corporation	GL-162	Chippawa, Ont.	Date of 1st deliveries for a 10-year term		1 654.2
Union Gas Limited	GL-92	Windsor, Ont.	85-11-01 90-11-01 91-11-01	90-10-31 91-10-31 92-10-31	1 703.7
Vector/7 Producers	GL-140	Niagara Falls, Ont.	90-11-08 91-11-01	91-10-31 2005-10-31	5 025.6
Westcoast Energy Marketing Ltd.	GL-131	Huntingdon & Kingsgate, B.C.	90-08-28 90-11-01	90-10-31 2004-10-31	23 228.0
Western Gas Marketing Limited	GL-128	Cornwall, Ont.	90-07-27 90-11-01	90-10-31 2005-10-31	1 820.0
	GL-141	Emerson, Man.	90-11-08 91-11-01	91-10-31 2005-10-31	2 326.5
	GL-163	Niagara Falls, Ont.	Date of 1st deliveries for a 15-year term		1 552.0

a - This licence authorizes an export of natural gas at Huntingdon, B.C. for storage in the U.S. and for subsequent import through exchange arrangements with other exporters.
b - This licence authorizes an export of natural gas near Sprague, Manitoba for import near Rainy River, Ont.
c - This licence authorizes the export of natural gas which the licensee has imported near Willow Creek, Sask. pursuant to Licence GLI-5.
d - This licence authorizes an export of natural gas near Emerson, Manitoba for import near Sault Ste-Marie and Sarnia, Ont., to serve the eastern Canadian market.
N/S Not Specified

NATIONAL ENERGY BOARD LICENCES AND LONG-TERM ORDERS TO IMPORT NATURAL GAS — AS AT 1991-12-31

Importer	Licence or Order Number	Point of Import	Term of Licence Or Order		Maximum Import Volumes
			From	To	Term (10^6m^3)
B.C. Gas Inc.	GL-123[a]	Huntingdon, B.C.	89-11-09	92-04-30	184.0
Canadian Western Natural Gas Company Limited	GO-117-88	Coutts, Alta.	89-01-01	2005-12-31	N/S
Centra Gas Ontario Inc.	GL-130[b]	Rainy River, Ont.	90-07-27	2005-10-31	3 150.0
Centra Gas Transmission Holdings Inc.	GL-30[b]	Rainy River, Ont.	70-11-01	95-10-31	8 498.1
Coastal Gas Marketing Company	GOL-1	Sarnia, Ont.	91-02-06	2016-02-06	N/S
Many Islands Natural Gas (Canada) Limited	GLI-5[b]	Willow Creek, Sask.	72-03-15	92-10-31	18 951.3
TransCanada PipeLines Limited	GL-42[d]	Sault Ste-Marie and Sarnia, Ont.	71-04-15 71-11-01	71-10-31 94-10-31	60 316.5
	GOL-2-91[d]	Sault Ste-Marie and Sarnia, Ont.	91-11-01	2005-10-31	N/S
Western Gas Marketing Ltd.	GOL-3-91[b]	Rainy River, Ont.	91-11-01	93-10-31	N/S

a - This licence authorizes an import of natural gas which the licensee has previously exported for storage in the U.S. The import occurs through exchange arrangements with other exporters.
b - This licence authorizes an import of natural gas which the licensee has exported near Sprague, Man.
c - This licence authorizes an import of natural gas which the licensee will subsequently export near Emerson, Manitoba, pursuant to Licence GL-44.
d - This licence authorizes an import of natural gas which the licensee has previously exported near Emerson, Manitoba. This natural gas serves Canadian markets.
N/S Not Specified.

ELECTRIC GENERATING CAPACITY IN CANADA AT 1990-12-31

Thousand Kilowatts*

		Thermal**				
		Steam		Internal	Combustion	
	Hydro	Conventional	Nuclear	Combustion	Turbine	TOTAL
Newfoundland	6 650	560	—	82	170	7 461
Prince Edward Island	—	71	—	11	41	122
Nova Scotia	386	1 564	—	1	205	2 156
New Brunswick	903	1 894	680	16	48	3 542
Quebec	27 085	628	685	113	363	28 874
Ontario	7 147	13 200	11 687	12	687	32 733
Manitoba	4 001	396	—	17	—	4 414
Saskatchewan	836	1 853	—	2	155	2 846
Alberta	734	6 744	—	35	464	7 976
British Columbia	10 849	1 399	—	98	151	12 497
Yukon	77	—	—	49	—	126
Northwest Territories	53	—	—	126	20	199
Canada	58 722	28 308	13 052	563	2 303	102 947

*Name plate rating.
**Canadian totals include confidential data.

ELECTRIC GENERATING CAPACITY IN CANADA AT YEAR-END

Thousand Kilowatts*

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Newfoundland	7 195	6 959	6 963	6 964	6 969	7 316	7 402	7 401	7 428	7 465	7 461
Prince Edward Island	118	118	118	122	122	122	122	122	122	122	122
Nova Scotia	2 029	2 029	1 865	2 199	2 355	2 372	2 346	2 346	2 162	2 162	2 156
New Brunswick	2 795	2 792	3 469	3 485	3 479	3 479	3 491	3 491	3 491	3 518	3 542
Quebec	20 531	21 924	22 762	24 654	26 938	26 991	27 910	27 826	27 783	28 323	28 874
Ontario	25 796	25 752	26 272	26 908	28 949	29 932	31 292	32 702	32 727	32 630	32 733
Manitoba	4 142	4 142	4 144	4 142	4 141	4 141	4 137	4 125	4 088	4 089	4 414
Saskatchewan	2 340	2 356	2 322	2 608	2 658	2 694	2 949	2 846	2 846	2 846	2 846
Alberta	5 807	6 200	6 427	7 233	7 220	7 219	7 604	7 600	7 595	7 978	7 976
British Columbia	10 525	10 762	10 886	10 864	12 043	12 451	12 508	12 497	12 499	12 503	12 497
Yukon	94	95	98	122	121	123	123	142	123	126	126
Northwest Territories	180	178	186	190	192	177	190	175	193	197	199
Canada**	81 999	83 746	85 547	89 527	95 224	97 019	100 074	101 273	101 055	101 960	102 947

* Name plate rating.

** Canadian totals include confidential data.

JULY 1992

SECTION XII
Table 1B

SUPPLY & DISPOSAL OF ELECTRIC ENERGY IN CANADA

GWh

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Hydro generation (net):												
1. Utilities*	215 452	220 487	231 964	226 048	233 471	253 868	271 296	279 133	285 593	275 178	259 230	262 946
2. Industries	27 742	30 730	31 430	29 257	29 914	29 654	29 977	29 440	28 467	29 351	29 326	31 060
3. Total	243 194	251 217	263 394	255 305	263 385	283 522	301 273	308 573	314 060	304 529	288 556	294 006
Thermal generation (net):												
4. Utilities	101 742	108 149	108 445	113 299	124 114	133 769	137 536	140 023	160 524	176 628	185 262	163 727
5. Industries	8 115	7 939	8 292	8 200	8 351	8 113	8 373	8 411	9 081	9 514	9 899	9 861
6. Total	109 857	116 088	116 737	121 499	132 465	141 882	145 909	148 434	169 605	186 142	195 161	173 588
7. Total generation (3 + 6)	353 051	367 305	380 131	376 805	395 850	425 404	447 182	457 007	483 665	490 671	483 717	467 594
8. Imported from United States	1 792	2 939	1 496	2 848	2 895	2 343	3 093	4 956	3 471	6 331	12 969	17 781
TOTAL (7 + 8)	354 843	370 244	381 627	379 653	398 745	427 747	450 275	461 963	487 136	497 002	496 686	485 375
CONSUMPTION												
11. Domestic & farm	83 214	92 441	94 733	99 144	101 183	108 234	113 984	117 997	118 761	129 980	138 239	138 468
12. Manufacturing	112 748	119 355	123 549	116 182	123 955	137 212	145 508	150 495	158 181	159 384	155 601	153 917
13. Mining	19 065	20 607	21 735	19 783	20 112	22 976	23 603	25 054	26 481	28 272	28 607	28 965
14. Commercial & Other	77 640	75 196	77 235	79 236	82 101	86 008	88 012	93 420	98 522	105 974	110 852	111 557
15. Total (11 + 12 + 13 + 14)	292 667	307 599	317 252	314 345	327 351	354 430	371 107	386 966	401 945	423 610	433 299	432 907
16. Losses & unaccounted	29 229	—	—	—	—	—	—	—	—	—	—	—
17. Energy used by utility plants	1 569	32 469	29 003	31 095	32 413	31 892	35 752	36 061	37 763	39 336	41 057	34 337
18. Residual error	—	—	—	—	—	—10	—	—	2	1	2	1
19. Total (15 + 16 + 17 + 18)	323 465	340 068	346 255	345 440	359 764	386 312	406 859	423 027	439 710	462 947	474 358	467 245
20. Exported to United States	31 378	30 176	35 372	34 213	38 981	41 435	43 416	38 936	47 426	34 055	22 328	18 130
21. TOTAL (19 + 20)	354 843	370 244	381 627	379 653	398 745	427 747	450 275	461 963	487 136	497 002	496 686	485 375

NOTE: New format effective 1980

* Includes wind & tidal generation effective 1986.

JULY 1992

ELECTRICITY STATISTICS — CANADA

	Elec. Consump. (1) (kWhx10^9)	Populat (cap.x10^6)	Consump./Cap. (kWh)	Sales (2) (10^3kWh)	Mills/kWh (current $)	Mills/kWh (1981 $)
1961	110.950	18.238	6 083.5	—	—	—
1962	116.135	18.583	6 249.5	—	—	—
1963	121.510	18.931	6 418.6	—	—	—
1964	133.949	19.290	6 944.0	—	—	—
1965	144.165	19.644	7 338.9	90 847	—	—
1966	156.956	20.015	7 841.9	99 774	—	
1967	165.812	20.378	8 136.8	107 762	—	—
1968	175.849	20.701	8 494.7	116 795	—	—
1969	188.648	21.001	8 982.8	127 451	—	—
1970	201.298	21.297	9 451.9	137 972	12.4	30.2
1971	211.492	21.568	9 805.8	147 203	12.8	30.3
1972	231.557	21.802	10 620.9	162 729	12.7	28.7
1973	249.298	22.042	11 310.1	177 724	13.1	27.5
1974	267.298	22.364	11 952.2	193 329	13.8	26.1
1975	265.995	22.697	11 717.6	194 571	16.0	27.4
1976	284.829	22.993	12 387.6	213 612	18.0	28.6
1977	299.929	23.273	12 887.4	226 004	21.4	31.5
1978	316.827	23.517	13 472.3	235 975	23.8	32.2
1979	323.469	23.747	13 621.4	245 537	26.2	32.5
1980	340.068	24.043	14 144.2	254 684	28.9	32.5
1981	346.332	24.342	14 277.8	265 930	31.5	31.5
1982	345.437	24.583	14 051.9	264 289	36.6	33.0
1983	359.751	24.787	14 513.7	272 555	39.3	33.5
1984	386.322	24.979	15 465.9	295 852	41.1	33.6
1985	406.859	25.165	16 167.7	312 773	43.0	33.8
1986	432.029	25.353	17 040.5	350 134	42.4	32.0
1987	439.599	25.617	17 160.4	366 575	43.5	31.5
1988	462.948	25.912	17 866.2	386 392	45.1	31.4
1989	474.358	26.219	18 092.1	395 624	47.5	31.5

(1) Total made available in Canada.
(2) Total sales to ultimate customers.

1991 WORLD PETROLEUM DATA ROUND-UP

	N. America	Caribbean & L. America	W. Europe	M. East	F. East Australia	Africa	Soviet Bloc & China	World
OIL PRODUCTION ..... Thousand Cubic Metres Daily	1 748	1 247	699	2 667	600	1 092	2 152	10 205
GAS PRODUCTION (Marketed).... Million Cubic Metres Daily	1 676	267	538	302	441	196	2 112	5 532
OIL RESERVES ..... Million Cubic Metres	6 626	19 037	2 304	105 135	3 194	9 598	13 158	159 052
GAS RESERVES ..... Billion Cubic Metres	7 500	6 800	5 100	37 400	7 400	8 800	51 000	124 000
REFINING CAPACITY ..... Thousand Cubic Metres Daily	2 738	1 238	2 287	795	1 790	446	2 883	12 177
OIL CONSUMPTION ..... Thousand Cubic Metres Daily	2 829	855	2 120	495	1 851	325	1 940	10 415
PRIMARY ENERGY USE ..... Million Tonnes Oil Equivalent	2 158	403	1 384	237	1 115	218	2 293	7 808

NOTE: This information has been averaged from various source data.

JULY 1992